

10/509,576

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	("5242828").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/05 13:29
L2	4	lyon same biosensor	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 14:11
L3	119	lyon and biosensor	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 14:11
L4	8	biosensor same (PEG or polyethylene adj glycol) same gold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 14:13
L5	86	nanoparticle NEAR5 (biosensor or chip\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 15:29
L6	0	nanoparticle NEAR3 (poyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 15:29
L7	4	nanoparticle NEAR3 (polyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 15:30
L8	30	nanoparticle\$1 NEAR4 (polyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 16:21

L9	306	"12093"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 16:21
L10	2	high adj affinity adj peptide same nanoparticles	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 16:23
L11	1	WO adj "200178786"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 16:27
L12	2	("5990479").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/05 16:49
L13	2	("20020072069").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/05 16:49
S1	114	biosensor same (PEG or polyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 14:12
S2	20	S1 and particle	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 11:25
S3	901	nanoparticle\$1 same (PEG or polyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 14:10
S4	40	S3 and coated NEAR3 (PEG or polyethylene adj glycol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/05 11:53

S5	2	("5763191").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/05 13:29
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10/509,576

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FILE 'HOME' ENTERED AT 14:41:12 ON 05 OCT 2005

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=> FILE REGISTRY

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FULL ESTIMATED COST	0.21	0.21

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STRUCTURE FILE UPDATES: 4 OCT 2005 HIGHEST RN 864494-87-1  
 DICTIONARY FILE UPDATES: 4 OCT 2005 HIGHEST RN 864494-87-1

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\*\*\*\*\*  
 \*  
 \* The CA roles and document type information have been removed from \*  
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 \* available and contains the CA role and document type information. \*  
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 \*\*\*\*\*

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=>

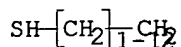
Uploading C:\Program Files\Stnexp\Queries\10509576.str  
SH-CH2-1-2 2-1-3

chain nodes :  
 1 2 3  
 chain bonds :  
 1-2 1-3  
 exact bonds :  
 1-2 1-3

Match level :  
 1:CLASS 2:CLASS 3:CLASS

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 14:41:49 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 117530 TO ITERATE

1.7% PROCESSED 2000 ITERATIONS 50 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: 2330320 TO 2370880  
PROJECTED ANSWERS: 87614 TO 95732

L2 50 SEA SSS SAM L1

=> s 12 sss full  
FULL SEARCH INITIATED 14:42:01 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2347703 TO ITERATE

42.6% PROCESSED 1000000 ITERATIONS 31297 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.10

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: 2347703 TO 2347703  
PROJECTED ANSWERS: 72664 TO 74288

L3 31297 SEA SSS FUL L1

=> FIL CAPLUS  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 161.33 161.54

FILE 'CAPLUS' ENTERED AT 14:42:18 ON 05 OCT 2005  
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FILE COVERS 1907 - 5 Oct 2005 VOL 143 ISS 15

FILE LAST UPDATED: 4 Oct 2005 (20051004/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 6156 L3

=> s 14 and (PEG or polyethylene glycol)

33451 PEG

1139 PEGS

33929 PEG

(PEG OR PEGS)

330940 POLYETHYLENE

12194 POLYETHYLENES

334671 POLYETHYLENE

(POLYETHYLENE OR POLYETHYLENES)

337044 GLYCOL

44194 GLYCOLS

352141 GLYCOL

(GLYCOL OR GLYCOLS)

95022 POLYETHYLENE GLYCOL

(POLYETHYLENE(W) GLYCOL)

L5 239 L4 AND (PEG OR POLYETHYLENE GLYCOL)

=> s 15 and nanoparticle

29294 NANOPARTICLE

48793 NANOPARTICLES

51420 NANOPARTICLE

(NANOPARTICLE OR NANOPARTICLES)

L6 10 L5 AND NANOPARTICLE

=> d 16 ibib abs hitstr tot

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:350720 CAPLUS

DOCUMENT NUMBER: 143:44178

TITLE: Biomedical applications of gold **nanoparticles** functionalized using hetero-bifunctional poly(ethylene glycol) spacer

AUTHOR(S): Fu, Wei; Shenoy, Dinesh; Li, Jane; Crasto, Curtis; Jones, Graham; Dimarzio, Charles; Sridhar, Srinivas; Amiji, Mansoor

CORPORATE SOURCE: Department of Physics, Northeastern University, Boston, MA, 02115, USA

SOURCE: Materials Research Society Symposium Proceedings (2005), 845(Nanoscale Materials Science in Biology and Medicine), 223-228

CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To increase the targeting potential, circulation time, and the flexibility of surface-attached biomedically-relevant ligands on gold **nanoparticles**, hetero-bifunctional poly(ethylene glycol) ( **PEG**, MW 1,500) was synthesized having a thiol group on one terminus and a reactive functional group on the other. Coumarin, a model fluorescent dye, was conjugated to the **PEG** spacer and gold **nanoparticles** were modified with coumarin-**PEG**-thiol. Surface attachment of coumarin through the **PEG** spacer decreases the fluorescence quenching effect of gold **nanoparticles**. The

results of cellular cytotoxicity and fluorescence confocal analyses showed that the **PEG** spacer modified **nanoparticles** were essentially non-toxic and could be efficiently internalized in the cells within one hour of incubation.

IT **853684-75-0P**

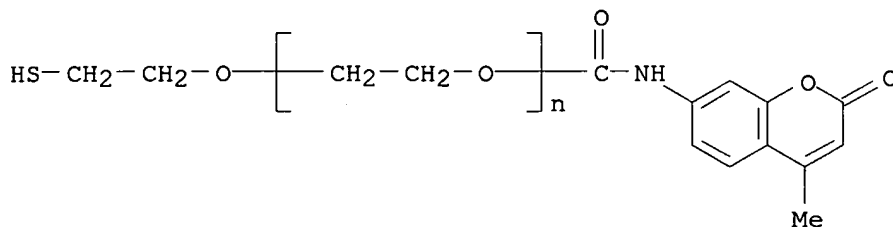
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(synthesis, cytotoxicity study, and fluorescence confocal microscopy of gold **nanoparticles** functionalized with thiol- and coumarin-terminated poly(ethylene glycol))

RN 853684-75-0 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[[[(4-methyl-2-oxo-2H-1-benzopyran-7-yl)amino]carbonyl]- $\omega$ -(2-mercaptoethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:904041 CAPLUS

DOCUMENT NUMBER: 141:362759

TITLE: Water-soluble PEGylated semiconductor **nanoparticles**, their manufacture, and biological diagnostic materials using them

INVENTOR(S): Ogura, Atsuhiko; Kang, Eui-chul; Kataoka, Kazunori; Nagasaki, Yukio

PATENT ASSIGNEE(S): NOF Corporation, Japan; Science University of Tokyo

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

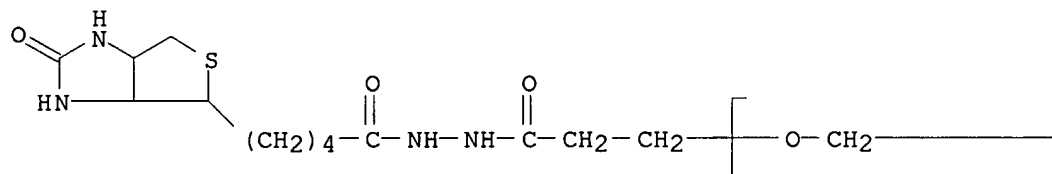
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004300253	A2	20041028	JP 2003-93900	20030331
US 2004250745	A1	20041216	US 2004-810305	20040326
PRIORITY APPLN. INFO.:			JP 2003-93900	A 20030331

AB The **nanoparticles** comprise (a) group II-VI semiconductor core-shell microcrystals having ZnO, ZnS, ZnSe, or ZnTe shell and (b) **polyethylene glycols** having Mn 300-20,000 which have SH group at least one end and bind to (a) via Cd. The **nanoparticles** are manufactured by reacting (b) with Ca salts, and (a) or by adding Cd to the surface of (a) and reacting with (b). (b) may have SH group at one end and CHO, OH, NH<sub>2</sub>, or CO<sub>2</sub>H at the other end to which biomols. showing specific recognition ability are bound. Thus, a CHCl<sub>3</sub> solution of CdSe-ZnS semiconductor microcrystals (preparation given) was treated with a phosphate buffer containing  $\alpha$ -3,3-diethoxypropyl- $\omega$ -mercapto- **PEG** (preparation given) and CdCl<sub>3</sub> under vigorous stirring in the dark. The reaction mixture was mixed with hexane and phosphate buffer, separated, and irradiated with UV (254 nm) to show fluorescence only in the lower aqueous layer.

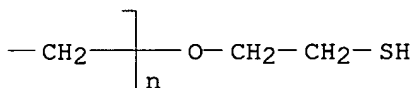


IT **780772-13-6DP**, reaction products with CdSe/ZnS core-shell microcrystals and CdCl<sub>2</sub>  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (manufacture of water-soluble PEGylated core-shell semiconductor **nanoparticles** having ZnO, ZnS, ZnSe, or ZnTe shell, and their application to biol. diagnosis)  
 RN 780772-13-6 CAPLUS  
 CN Poly(oxy-1,2-ethanediyl), α-[3-[2-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]hydrazino]-3-oxopropyl]-ω-(2-mercaptoethoxy)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:868459 CAPLUS  
 DOCUMENT NUMBER: 142:436504  
 TITLE: Biocompatible gold **nanoparticles**  
 AUTHOR(S): Tshikhudo, T. R.; Wang, Z.; Brust, M.  
 CORPORATE SOURCE: Centre for Nanoscale Science, Department of Chemistry, The University of Liverpool, Liverpool, L69 7ZD, UK  
 SOURCE: Materials Science and Technology (2004), 20(8), 980-984  
 CODEN: MSCTEP; ISSN: 0267-0836  
 PUBLISHER: Maney Publishing  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Thiolalkylated **polyethylene glycol (PEG)** ligands were designed and synthesized for use in the manufacturing of stable H<sub>2</sub>O soluble Au MPCs. In addition to ongoing work on the synthesis of size and shape selective aqueous Au **nanoparticles**, the effect of avidin Au **nanoparticle** (AGNP) ratio on biotinylated peptide Au **nanoparticles** (BPGNP) also was studied.  
 IT **850444-77-8P**  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (manufacturing of biocompatible, water soluble gold **nanoparticles** using thiolalkylated **polyethylene glycol**)  
 RN 850444-77-8 CAPLUS

CN 3,6,9,12-Tetraoxatricosane-23-thiol, 1-amino- (9CI) (CA INDEX NAME)

H<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-(CH<sub>2</sub>)<sub>11</sub>-SH

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:424087 CAPLUS

DOCUMENT NUMBER: 141:145667

TITLE: Design of water-soluble quantum dots with novel surface ligands for biological applications

AUTHOR(S): Uyeda, H. Tetsuo; Medintz, Igor L.; Mattoussi, Hedi

CORPORATE SOURCE: Division of Optical Sciences, U.S. Naval Research Laboratory, Washington, DC, 20375, USA

SOURCE: Materials Research Society Symposium Proceedings (2004), Volume Date 2003, 789(Quantum Dots, Nanoparticles and Nanowires), 111-116  
CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:145667

AB We have designed a series of organic oligo- and **polyethylene glycol (PEG)** based surface capping ligands that allow for QD manipulation in aqueous media. We utilized readily available thioctic acid and various oligo- and **polyethylene glycols** in simple esterification schemes, followed by reduction of the dithiolane to produce multi-gram quantities of capping substrates. Cap exchange of the native trioctyl-phosphine and -phosphine oxide based ligands with the **PEG**-terminated dithiol-alkyl cap readily resulted in aqueous dispersions of QDs that were homogeneous and stable in various pH ranges over an extended period of time. Mixed surface capping strategies utilizing ratios of dihydrolipoic acid to the pegylated dihydrolipoic acid were also prepared. We anticipated that such systems should allow one to covalently attach amine containing biomols. to **nanoparticle** systems bearing carboxylates, employing known coupling agents, such as (dimethylamino) propyl-3-ethyl-carbodiimide (EDC). This design and conjugation strategy may facilitate the development of a new generation of QD-bioconjugates, which can be directly utilized in bio-related applications such as sensing and cellular imaging.

IT 725211-24-5P

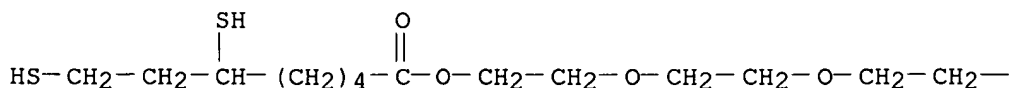
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

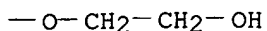
(design of water-soluble CdSe/ZnS quantum dots with novel pegylated dihydrolipoic acid as surface ligands for biosensing or cellular imaging)

RN 725211-24-5 CAPLUS

CN Octanoic acid, 6,8-dimercapto-, 2-[2-[2-(2-hydroxyethoxy)ethoxy]ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A





IT 725211-26-7P 725211-28-9P

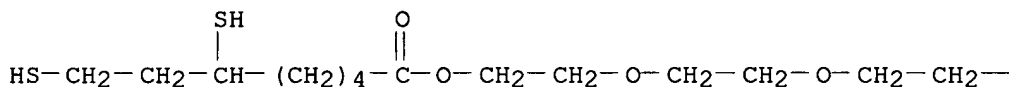
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(for coating on quantum dots; design of water-soluble CdSe/ZnS quantum dots with novel pegylated dihydrolipoic acid as surface ligands for biosensing or cellular imaging)

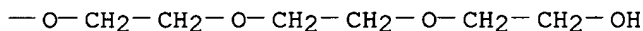
RN 725211-26-7 CAPLUS

CN Octanoic acid, 6,8-dimercapto-, 17-hydroxy-3,6,9,12,15-pentaoxaheptadec-1-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

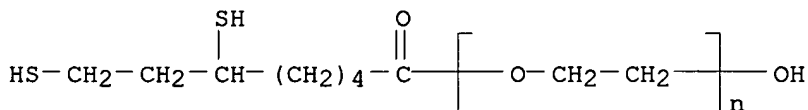


PAGE 1-B



RN 725211-28-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(6,8-dimercapto-1-oxooctyl)- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:5676 CAPLUS

DOCUMENT NUMBER: 140:220643

TITLE: The zwitterion effect in high-conductivity polyelectrolyte materials

AUTHOR(S): Tiyaiboonthaiya, Churat; Pringle, Jennifer M.; Sun, Jiazeng; Byrne, Nolene; Howlett, Patrick C.; MacFarlane, Douglas R.; Forsyth, Maria

CORPORATE SOURCE: School of Chemistry, Monash University, Clayton, Victoria, 3800, Australia

SOURCE: Nature Materials (2004), 3(1), 29-32

CODEN: NMAACR; ISSN: 1476-1122

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The future of lithium metal batteries as a widespread, safe and reliable form of high-energy-d. rechargeable battery depends on a significant advancement in the electrolyte material used in these devices. Mol. solvent-based electrolytes were superseded by polymer electrolytes in some prototype devices, primarily in a drive to overcome leakage and flammability problems, but these often exhibit low ionic conductivity and prohibitively poor lithium-ion transport. To overcome this, it is necessary to encourage dissociation of the lithium ion from the anionic polymer backbone, ideally without the introduction of competing, mobile ionic species. Here the authors demonstrate the effect of zwitterionic compds., where the cationic and anionic charges are immobilized on the same mol., as extremely effective lithium ion dissociation enhancers. The zwitterion produces electrolyte materials with conductivities up to seven times larger than the pure polyelectrolyte gels, a phenomenon that appears to be common to a number of different copolymer and solvent systems.

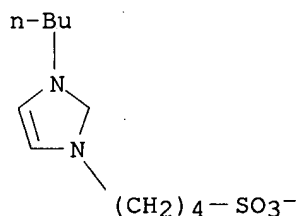
IT 439937-61-8P

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)

(zwitterion, gels with P(AMPSLi-c-DMAA)/PC and also with TiO<sub>2</sub>; zwitterion effect in high-conductivity polyelectrolyte materials)

RN 439937-61-8 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-(4-sulfobutyl)-, inner salt (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:971864 CAPLUS

DOCUMENT NUMBER: 140:31485

TITLE: Immediate-release pharmaceutical formulation of amidine compounds

INVENTOR(S): Abrahmsen Alami, Susanna; Inghardt, Tord; Magnusson, Anders; Sigfridsson, Carl-Gustaf; Thune, Mikael

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 127 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

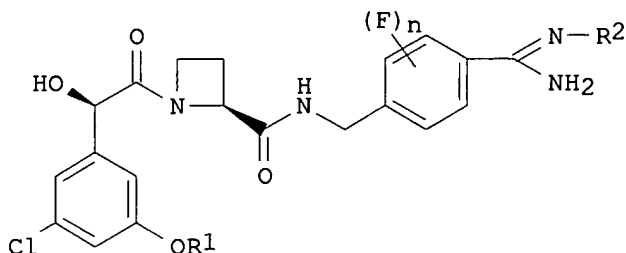
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003101423	A1	20031211	WO 2003-SE857	20030527
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,				

TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
CA 2485533 AA 20031211 CA 2003-2485533 20030527  
BR 2003011363 A 20050301 BR 2003-11363 20030527  
EP 1513496 A1 20050316 EP 2003-730964 20030527  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
PRIORITY APPLN. INFO.: SE 2002-1658 A 20020531  
WO 2003-SE857 W 20030527  
OTHER SOURCE(S): MARPAT 140:31485  
GI



AB An immediate-release pharmaceutical formulation is provided comprising (a) as active ingredient, a compound of formula I (R1 = Cl-2 alkyl substituted by one or more fluoro substituents; R2 = H, OH, OMe, OEt; n = 0, 1, 2) or a pharmaceutically acceptable salt thereof; and (b) a pharmaceutically acceptable diluent or carrier. When the active ingredient is other than in the form of a salt, the formulation does not solely contain (i) a solution of one active ingredient and water, (ii) a solution of one active ingredient and DMSO, or (iii) a solution of one active ingredient in a mixture of ethanol/PEG 660 12-hydroxy stearate/water (5:5:90). Such formulations are used for the treatment of a cardiovascular disorder. For example, a solution was prepared by dissolving Compound A [I (R1 = CHF2, R2 = OMe, n = 0)

(preparation

given)] in a hydroxypropyl-β-cyclodextrin/water diluent (40:60 weight/weight%) (136 μmol Compound A to 1 mL diluent) and adjusting pH to 3.7 with HCl. The solubility of Compound A was at least 700 times higher in this vehicle compared to water alone.

IT **631916-91-1P 631917-18-5P 631917-19-6P**

**631917-20-9P 631917-31-2P 634151-59-0P**

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and immediate-release formulation of amidine compds. for treatment of thrombosis)

RN 631916-91-1 CAPLUS

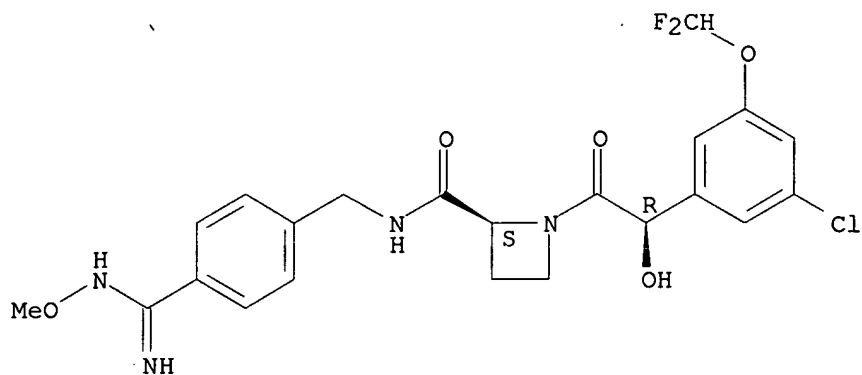
CN Ethanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

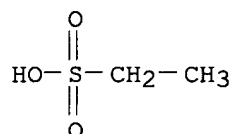
Absolute stereochemistry.



CM 2

CRN 594-45-6

CMF C2 H6 O3 S



RN 631917-18-5 CAPLUS

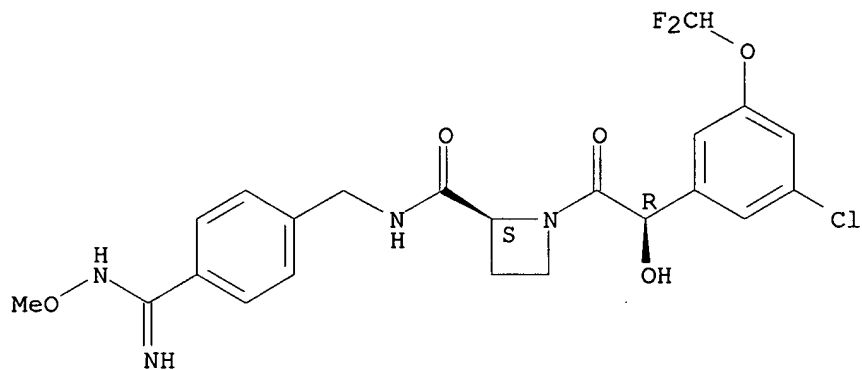
CN 1-Propanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

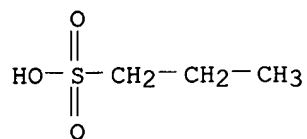
Absolute stereochemistry.



CM 2

CRN 5284-66-2

CMF C3 H8 O3 S



RN 631917-19-6 CAPLUS

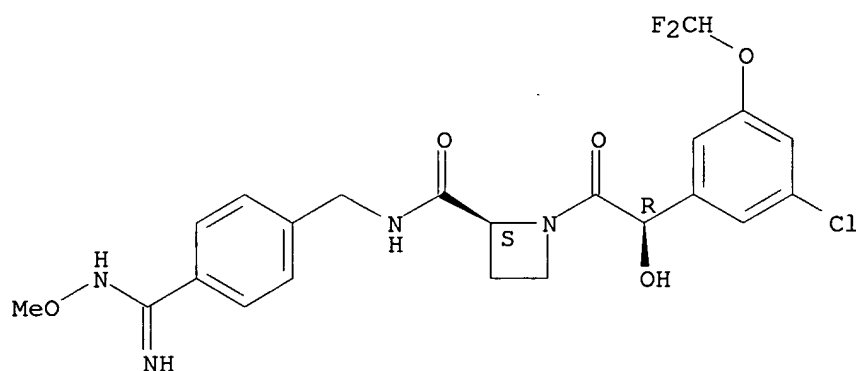
CN 1-Butanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

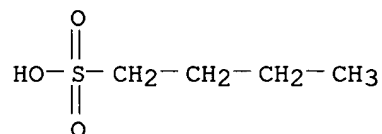
Absolute stereochemistry.



CM 2

CRN 2386-47-2

CMF C4 H10 O3 S



RN 631917-20-9 CAPLUS

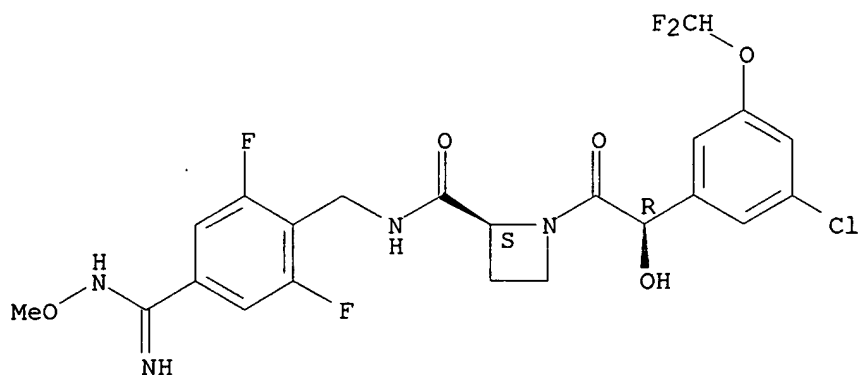
CN Ethanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[2,6-difluoro-4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433938-32-0

CMF C22 H21 Cl F4 N4 O5

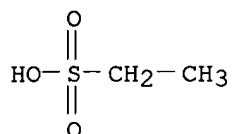
Absolute stereochemistry.



CM 2

CRN 594-45-6

CMF C2 H6 O3 S



RN 631917-31-2 CAPLUS

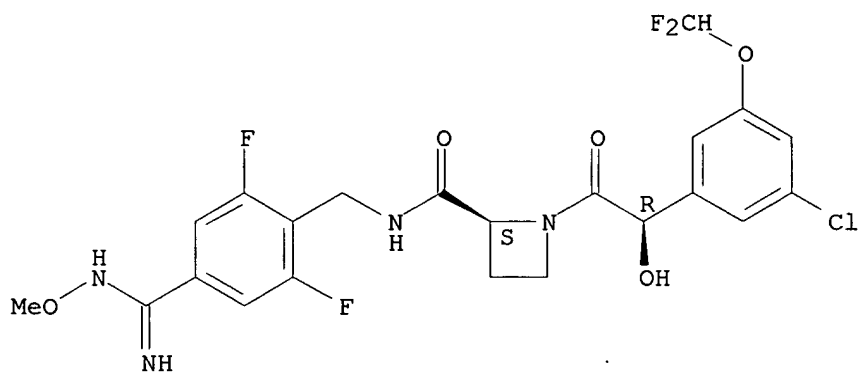
CN 1,2-Ethanedithiolic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[2,6-difluoro-4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 433938-32-0

CMF C22 H21 Cl F4 N4 O5

Absolute stereochemistry.



CM 2

CRN 110-04-3

CMF C2 H6 O6 S2



HO<sub>3</sub>S-CH<sub>2</sub>-CH<sub>2</sub>-SO<sub>3</sub>H

RN 634151-59-0 CAPLUS

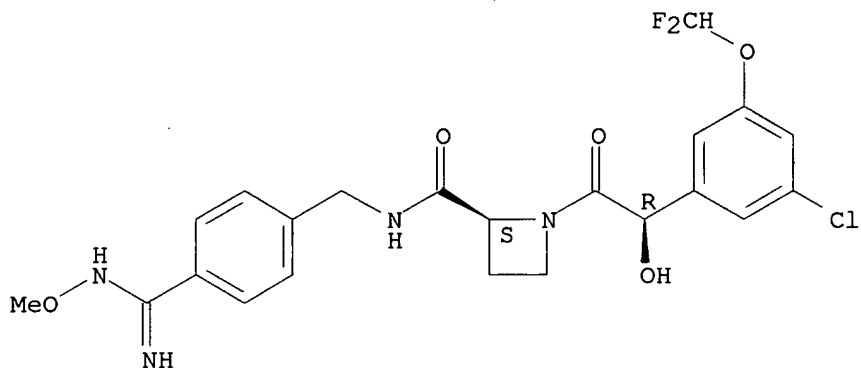
CN 1,2-Ethanedisulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

Absolute stereochemistry.



CM 2

CRN 110-04-3

CMF C2 H6 O6 S2

HO<sub>3</sub>S-CH<sub>2</sub>-CH<sub>2</sub>-SO<sub>3</sub>H

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:797006 CAPLUS

DOCUMENT NUMBER: 139:304103

TITLE: Biosensor chip surface carrying polyethylene glycolated **nanoparticles**

INVENTOR(S): Kataoka, Kazunori; Nagasaki, Yukio; Otsuka, Hidenori; Uchida, Katsumi; Ishii, Takehiko; Suzuki, Yuko; Akiyama, Yoshitsugu; Takae, Seiji

PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003083478 A1 20031009 WO 2003-JP3504 20030324  
W: CA, CN, KR, US  
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  
CA 2480770 AA 20031009 CA 2003-2480770 20030324  
EP 1496363 A1 20050112 EP 2003-712842 20030324  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
US 2005106570 A1 20050519 US 2003-509576 20030324  
JP 2005180921 A2 20050707 JP 2003-80524 20030324  
PRIORITY APPLN. INFO.: JP 2002-101134 A 20020403  
WO 2003-JP3504 W 20030324

AB A highly sensitive bioassay sensor system is provided, with which nonspecific adsorption of impurities such as proteins in a biol. sample is prevented. For amplification in this system used are polyethylene glycolated particles in which a metal or semiconductor common to the sensor material is enclosed. These particles are carried by the biosensor chip surface through a pair of biol. specific binding substances, one of which (e.g., carbohydrate, antigen, hapten, enzyme substrate, hormone, oligonucleotide, biotin) is bound to the particles, and the other of which (e.g., lectin, antibody, enzyme, hormone receptor, complimentary oligo-/polynucleotide, streptavidin) is bound to the sensor surface. A test substance is detected by measuring the change in the extent of binding of the particles to the biosensor chip surface upon the competition by the test substance.

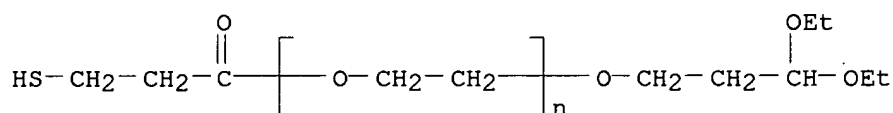
IT **610778-56-8P 610778-57-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(biosensor chip surface carrying polyethylene glycolated **nanoparticles**)

RN 610778-56-8 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(3-mercapto-1-oxopropyl)- $\omega$ -(3,3-diethoxypropoxy)- (9CI) (CA INDEX NAME)



RN 610778-57-9 CAPLUS

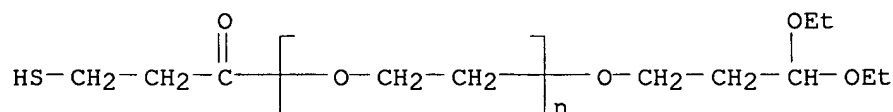
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, telomer with  $\alpha$ -(3-mercapto-1-oxopropyl)- $\omega$ -(3,3-diethoxypropoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 610778-56-8

CMF (C2 H4 O)<sub>n</sub> C10 H20 O4 S

CCI PMS



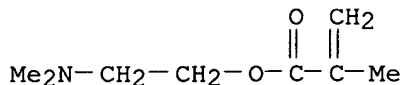
CM 2

CRN 25154-86-3

CMF (C8 H15 N O2)x  
CCI PMS

CM 3

CRN 2867-47-2  
CMF C8 H15 N O2



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:532140 CAPLUS

DOCUMENT NUMBER: 139:106450.

TITLE: Targeted multivalent macromolecules

INVENTOR(S): Wartchow, Charles Aaron; Dechene, Neal Edward; Pease, John S.; Shen, Zhimin; Trulson, Julie; Bednarski, Mark David; Danthi, S. Narasimhan; Zhang, Michael; Choi, Hoyul Steven

PATENT ASSIGNEE(S): Targesome, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 71 pp., Cont.-in-part of U.S. Ser. No. 976,254.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

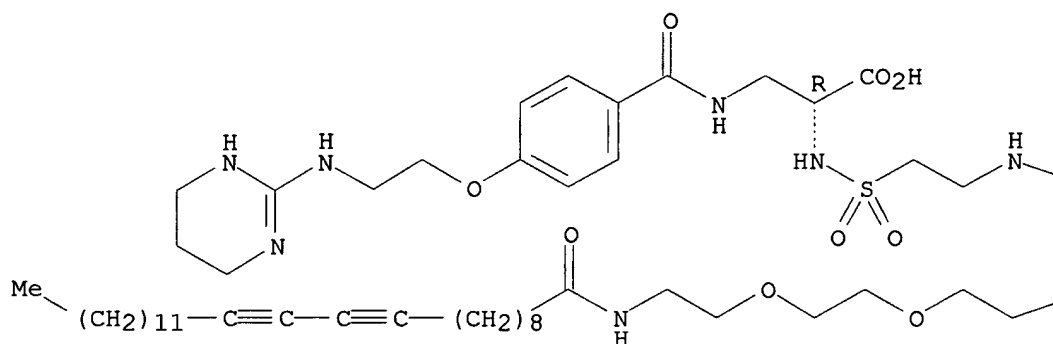
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003129223	A1	20030710	US 2002-158777	20020530
US 2002071843	A1	20020613	US 2001-976254	20011011
PRIORITY APPLN. INFO.:			US 2000-239684P	P 20001011
			US 2001-294309P	P 20010530
			US 2001-309104P	P 20010731
			US 2001-312435P	P 20010815
			US 2001-976254	A2 20011011

AB Targeted therapeutic agents, comprising a linking carrier, a therapeutic entity associated with the linking carrier, and at least one targeting entity are provided, as well as methods for their preparation and use. A targeted therapeutic agent is selected from matrix metalloprotease inhibitors, analgesics, aggrecanase inhibitors, alkylating agents, topoisomerase inhibitors, estrogens, androgens, interferons, intercalating agents, kinase modulators, etc. The linking carrier comprises a phosphatidylcholine and is selected from liposomes and a polymerized vesicle. A targeting entity targets a lipid construct to a target selected from a cell surface target, an intracellular target, and an extracellular matrix component. The targeting entity has, e.g., a vascular or tumor cell target selected from chemokine receptors, matrix metalloproteases, integrins, or prostate-specific membrane antigens. For example, integrin-targeted 90Y-labeled peptidomimetic vesicle complexes (IA-NP-Y90) at 5 µCi/g reduced tumor growth in a melanoma mouse model with average normalized tumor volume less than half the volume in the buffer-treated animals. In addition, the average tumor volume quadrupling time (TVQT) for tumor treated with IA-NP-Y90 was 15.0 days compared to 6.4 days for tumors treated with buffer.

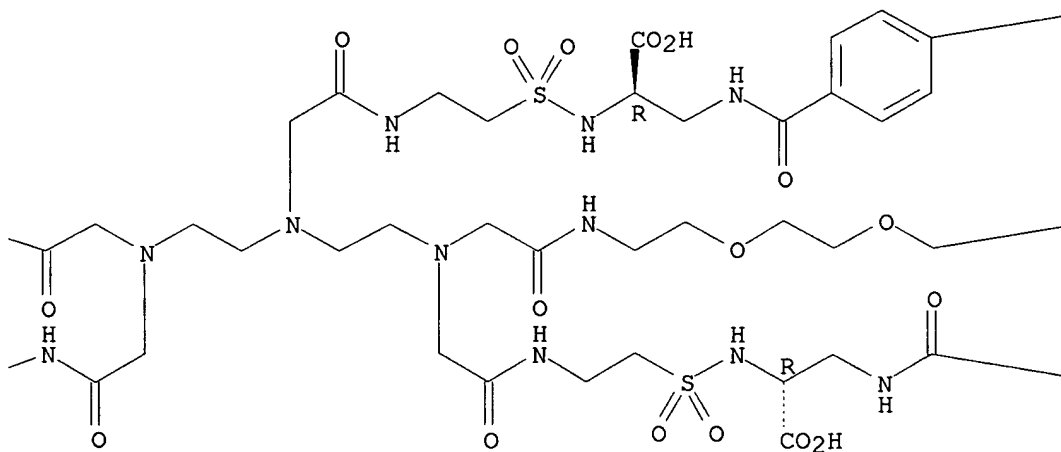
IT **477274-37-6DP**, polymer containing  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (paramagnetic **nanoparticles** containing; preparation of targeted multivalent macromols. for therapy, imaging and diagnosis of cancer)  
 RN 477274-37-6 CAPLUS  
 CN 4,22-Dithia-3,7,10,13,16,19,23-heptaazapentacosanedioic acid, 13-[(8R)-8-carboxy-6,6-dioxido-2,11-dioxo-11-[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]phenyl]-6-thia-3,7,10-triazaundec-1-yl]-10,16-bis(2,13-dioxo-6,9-dioxa-3,12-diazaheptatriaconta-22,24-diyn-1-yl)-8,18-dioxo-2,24-bis[[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]methyl]-, 4,4,22,22-tetraoxide, (2R,24R)- (9CI) (CA INDEX NAME)

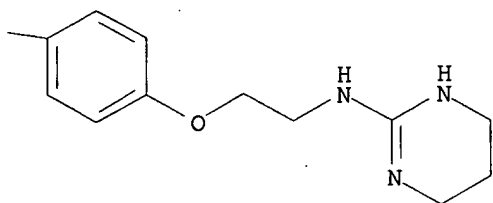
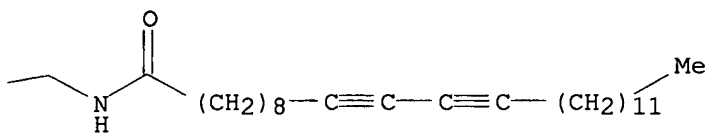
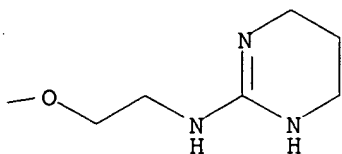
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





IT 477249-25-5P 477249-26-6P 477249-27-7P  
477249-28-8P 477249-29-9P

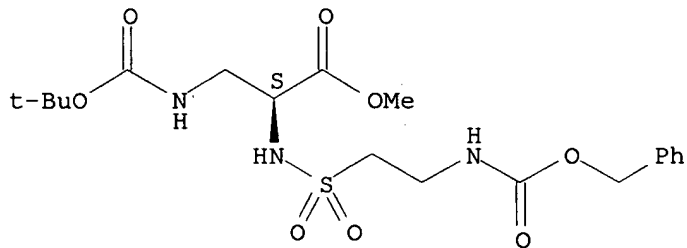
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of targeted multivalent macromols. for therapy, imaging and  
diagnosis of cancer)

RN 477249-25-5 CAPLUS

CN 5-Thia-2,6,9-triazadecanedioic acid, 7-(methoxycarbonyl)-,  
10-(1,1-dimethylethyl) 1-(phenylmethyl) ester, 5,5-dioxide, (7S)- (9CI)  
(CA INDEX NAME)

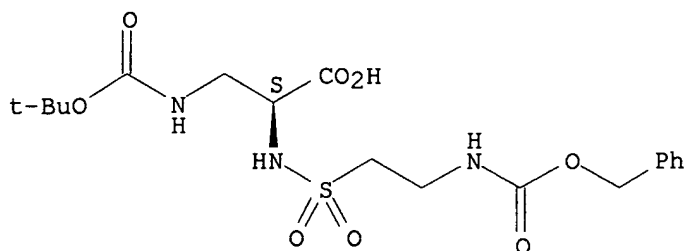
Absolute stereochemistry.



RN 477249-26-6 CAPLUS

CN 5-Thia-2,6,9-triazadecanedioic acid, 7-carboxy-, 10-(1,1-dimethylethyl)  
1-(phenylmethyl) ester, 5,5-dioxide, (7S)- (9CI) (CA INDEX NAME)

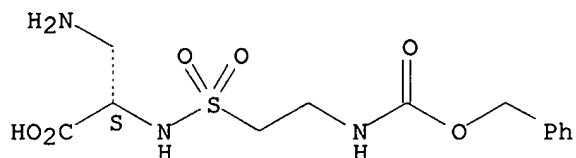
Absolute stereochemistry.



RN 477249-27-7 CAPLUS

CN 2-Oxa-7-thia-4,8-diazadecan-10-oic acid, 9-(aminomethyl)-3-oxo-1-phenyl-, 7,7-dioxide, (9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

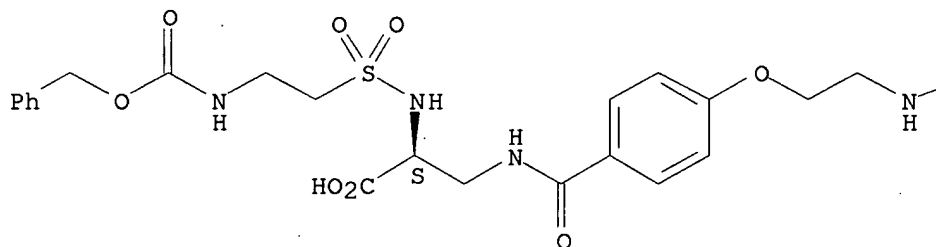


RN 477249-28-8 CAPLUS

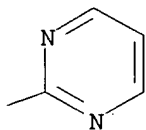
CN 2-Oxa-7-thia-4,8-diazadecan-10-oic acid, 3-oxo-1-phenyl-9-[[[4-[2-(2-pyrimidinylamino)ethoxy]benzoyl]amino]methyl]-, 7,7-dioxide, (9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



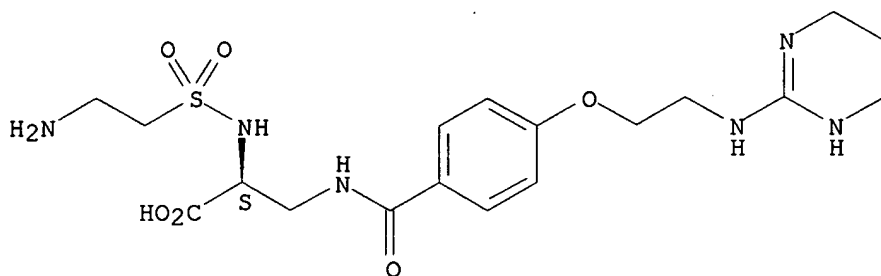
PAGE 1-B



RN 477249-29-9 CAPLUS

CN L-Alanine, N-[(2-aminoethyl) sulfonyl]-3-[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 477274-37-6P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)

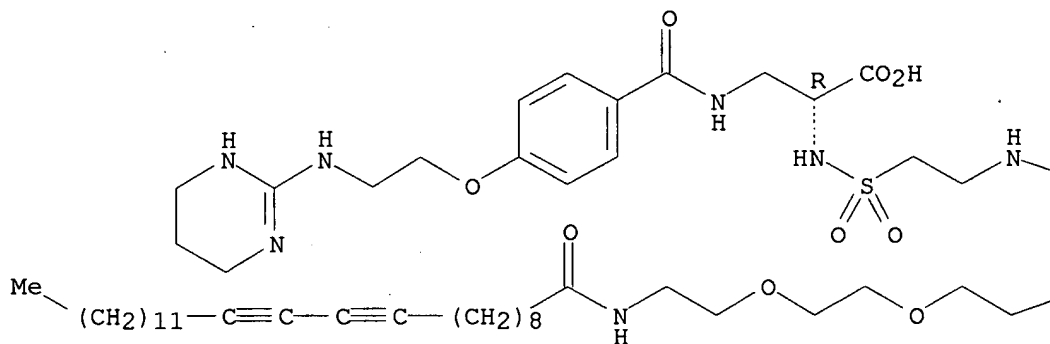
(preparation of targeted multivalent macromols. for therapy, imaging and  
diagnosis of cancer)

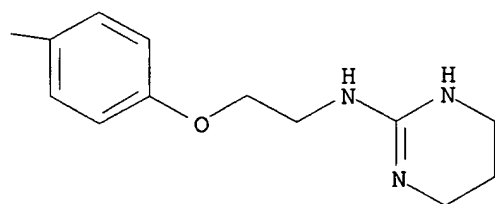
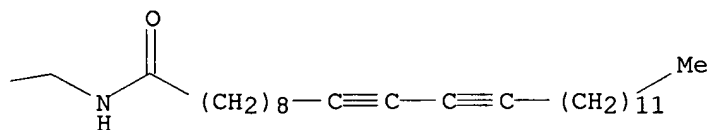
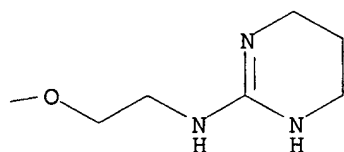
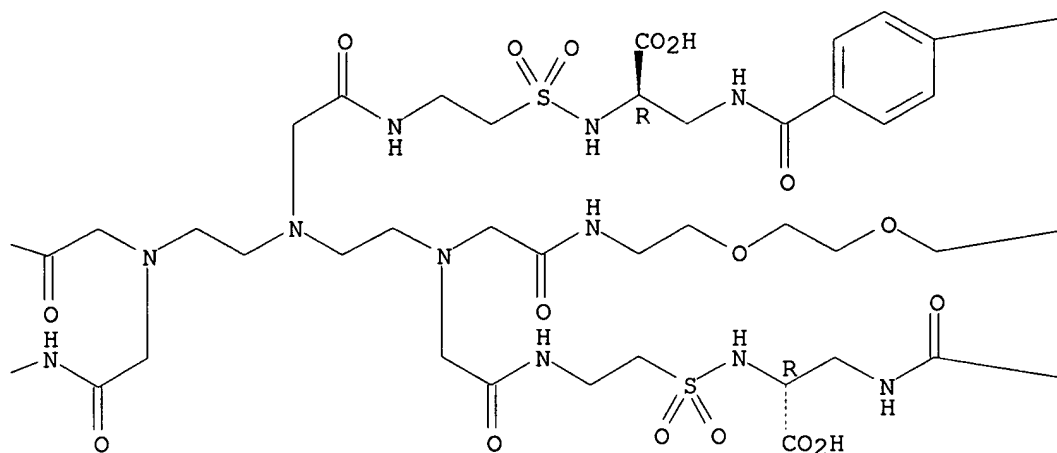
RN 477274-37-6 CAPLUS

CN 4,22-Dithia-3,7,10,13,16,19,23-heptaazapentacosanedioic acid,  
13-[(8R)-8-carboxy-6,6-dioxido-2,11-dioxo-11-[4-[2-[(1,4,5,6-tetrahydro-2-  
pyrimidinyl)amino]ethoxy]phenyl]-6-thia-3,7,10-triazaundec-1-yl]-10,16-  
bis(2,13-dioxo-6,9-dioxa-3,12-diazaheptatriaconta-22,24-diyn-1-yl)-8,18-  
dioxo-2,24-bis[[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benz  
oyl]amino]methyl]-, 4,4,22,22-tetraoxide, (2R,24R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





IT **477274-46-7P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of targeted multivalent macromols. for therapy, imaging and diagnosis of cancer)

RN 477274-46-7 CAPLUS

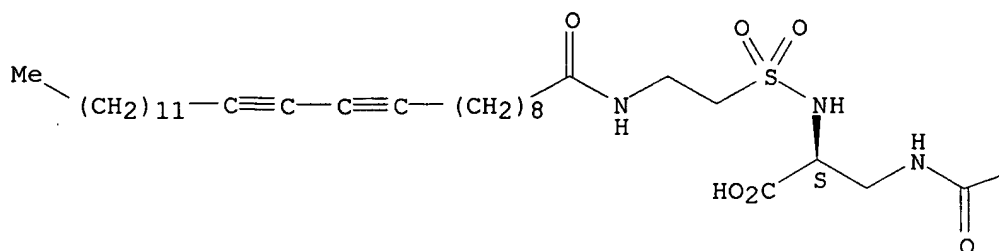
CN L-Alanine, N-[[2-[(1-oxo-10,12-pentacosadiynyl)amino]ethyl]sulfonyl]-3-[[4-



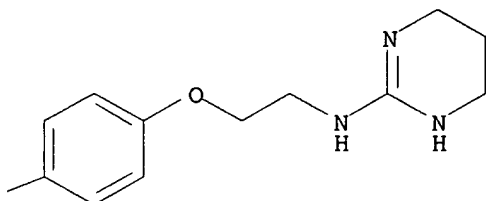
[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:346582 CAPLUS

DOCUMENT NUMBER: 138:61132

TITLE: Gels and **nanoparticles** responsive to physiological pH

AUTHOR(S): Bae, Y. H.; Na, K.; Han, S. K.; Kang, S. I.; Lee, E. S.

CORPORATE SOURCE: Center for Biomaterial and Biotechnology, Kwangju Institute of Science and Technology, Kwangju, 500-712, S. Korea

SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 1, 10-11. Controlled Release Society: Minneapolis, Minn. CODEN: 69CNY8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB This presentation summarizes our recent works on the properties of soluble polymers, hydrogels, and nanoparticulates (self-assembled **nanoparticles** and polymeric micelles) that are responsive to pH. Incorporation of a weak acidic moiety of sulfonamide or weak basic imidazole groups into the polymers endowed remarkable pH sensitivities, such as sharp transitions in polymer solubility, swelling volume of hydrogels, **nanoparticle** aggregation, and micelle disruption in a narrow pH range, particularly around physiol. pH. These aspects of the polymeric systems may provide us new applications in carrier targeting to tumors, pH-triggered release, biosepn., sensor, and actuators.

IT **479586-83-9DP**, reaction products with carboxylated lactide-polyethylene glycol block polymer

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(sulfonamide copolymer gels and **nanoparticles** responsive to  
physiol. pH)  
RN 479586-83-9 CAPLUS  
CN 2-Propenamide, N-[4-[[ (2,6-dimethoxy-4-pyrimidinyl)amino]sulfonyl]phenyl]-  
2-methyl-, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2  
CMF C2 H6 O S

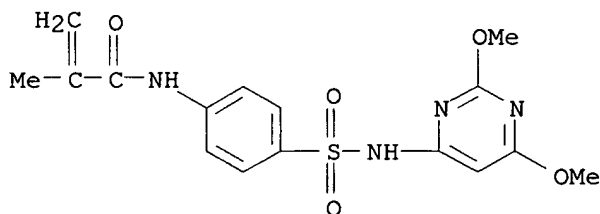
HO-CH<sub>2</sub>-CH<sub>2</sub>-SH

CM 2

CRN 479586-82-8  
CMF (C16 H18 N4 O5 S)x  
CCI PMS

CM 3

CRN 287967-58-2  
CMF C16 H18 N4 O5 S



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2002:286166 CAPLUS  
DOCUMENT NUMBER: 136:311326  
TITLE: Coating compositions containing luminescent  
semiconductor **nanoparticles**  
INVENTOR(S): Kawa, Manabu  
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002114928	A2	20020416	JP 2000-306965	20001006
PRIORITY APPLN. INFO.:			JP 2000-306965	20001006

AB The coatings useful for detective applications such as finger print  
finding, counterfeit detection, etc., contain polymer binders,  
semiconductor **nanoparticles** of Zn or Cd type and solvents.  
Thus, adding 0.4 g a triethylene glycol monomethyl ether (I)

11-mercaptoundecanoate to a dissoln. of .apprx.0.5 g CdSe nanocrystals having ZnS shells and Ph3PO ligand on surface in 6 mL CH2Cl2 and reacting in the dark for 18 h gave an EtOH-soluble product containing I as ligand which replaced for Ph3PO. Dissolving the product in CH2Cl2, adding EtOH, evaporating to remove CH2Cl2, mixing with a **polyethylene glycol** methacrylate 0.5, Me methacrylate 0.2, AIBN 0.05 and a poly(ethylene oxide) 0.2 g gave a solution, a finger print obtained from it after impressing on a paper and polymerization by heat showed orange color.

IT **394647-01-9**, Triethylene glycol monomethyl ether

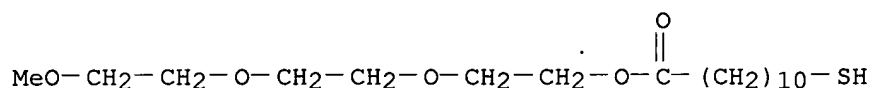
11-mercaptoundecanoate

RL: MOA (Modifier or additive use); USES (Uses)

(soluble ligands for nanocrystals; coating compns. containing luminescent semiconductor **nanoparticles**)

RN 394647-01-9 CAPLUS

CN Undecanoic acid, 11-mercapto-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	61.46	223.00

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.30	-7.30

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STRUCTURE FILE UPDATES: 4 OCT 2005 HIGHEST RN 864494-87-1  
 DICTIONARY FILE UPDATES: 4 OCT 2005 HIGHEST RN 864494-87-1

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 \*  
 \* The CA roles and document type information have been removed from \*  
 \* the IDE default display format and the ED field has been added, \*  
 \* effective March 20, 2005. A new display format, IDERL, is now \*  
 \* available and contains the CA role and document type information. \*  
 \*  
 \*\*\*\*\*

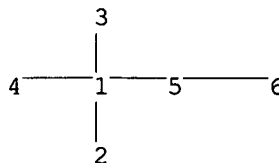
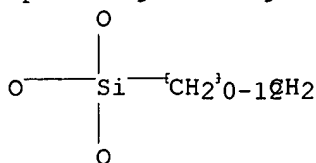
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10509576a.str



chain nodes :

1 2 3 4 5 6

chain bonds :

1-4 1-2 1-3 1-5 5-6

exact bonds :

1-4 1-2 1-3 1-5 5-6

Match level :

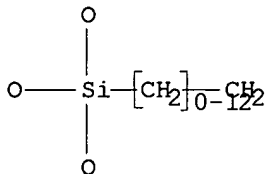
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 14:48:30 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 7118 TO ITERATE

28.1% PROCESSED 2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 137303 TO 147417

PROJECTED ANSWERS: 37527 TO 42905

L8 50 SEA SSS SAM L7

=> s 17 sss full  
FULL SEARCH INITIATED 14:48:38 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 141100 TO ITERATE

100.0% PROCESSED 141100 ITERATIONS 38043 ANSWERS  
SEARCH TIME: 00.00.01

L9 38043 SEA SSS FUL L7

=> FIL CAPLUS		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	161.33	384.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-7.30

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FILE COVERS 1907 - 5 Oct 2005 VOL 143 ISS 15  
FILE LAST UPDATED: 4 Oct 2005 (20051004/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 19  
L10 55444 L9

=> s 110 and (PEG or polyethylene glycol)  
33451 PEG  
1139 PEGS  
33929 PEG  
(PEG OR PEGS)  
330940 POLYETHYLENE  
12194 POLYETHYLENES  
334671 POLYETHYLENE  
(POLYETHYLENE OR POLYETHYLENES)  
337044 GLYCOL  
44194 GLYCOLS  
352141 GLYCOL  
(GLYCOL OR GLYCOLS)  
95022 POLYETHYLENE GLYCOL  
(POLYETHYLENE(W)GLYCOL)

L11 1343 L10 AND (PEG OR POLYETHYLENE GLYCOL)

=> s 111 and nonoparticle

5 NONOPARTICLE  
12 NONOPARTICLES  
17 NONOPARTICLE  
(NONOPARTICLE OR NONOPARTICLES)  
L12 0 L11 AND NONOPARTICLE

=> s l11 and biosensor  
16102 BIOSENSOR  
19017 BIOSENSORS  
23294 BIOSENSOR  
(BIOSENSOR OR BIOSENSORS)  
L13 22 L11 AND BIOSENSOR

=> s l13 and particle  
664262 PARTICLE  
743680 PARTICLES  
1119560 PARTICLE  
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L14 1 L13 AND PARTICLE

=> d l14 ibib abs hitstr tot

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1999:263353 CAPLUS  
DOCUMENT NUMBER: 130:293421  
TITLE: A new glucose **biosensor** based on sandwich  
configuration of organically modified sol-gel glass  
AUTHOR(S): Pandey, P. C.; Upadhyay, S.; Pathak, H. C.  
CORPORATE SOURCE: Department Chemistry, Banaras Hindu University,  
Varanasi, 221005, India  
SOURCE: Electroanalysis (1999), 11(1), 59-64  
CODEN: ELANEU; ISSN: 1040-0397  
PUBLISHER: Wiley-VCH Verlag GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A new glucose **biosensor** was developed based on the sandwich configuration of organically modified sol-gel glasses. The new sol-gel glass was developed using 3-aminopropyltrimethoxysilane and 2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane. Two types of sol-gel glasses were used to develop glucose **biosensors** that differ in absence (A) and the presence (B) of graphite powder (**particle** size 1-2  $\mu$ ). An addnl. additive ( **polyethylene glycol** , Mol. weight 6000) was also incorporated in both types of the upper sol-gel glass layer. The new sol-gel matrix with immobilized glucose oxidase was analyzed by SEM. The sandwich configuration was developed using a bilayer of sol-gel glasses having a layer of glucose oxidase in between the bilayer. This electrode with special configuration was used to form a layer of sol-gel glass of ca. 0.2 mm thickness. The performance of sol-gel glasses (A and B) was analyzed based on cyclic voltammetry using ferrocene monocarboxylic acid. The results showed a diffusion-limited condition of ferrocene across the sol-gel matrix. The characterization of sol-gel glass-based **biosensor** was recorded based on the cyclic voltammograms in absence and presence of glucose. The results showed an increase in anodic current which is also characteristic of H<sub>2</sub>O<sub>2</sub> oxidation in both cases (A and B). The responses of the sol-gel glasses-based **biosensors** were analyzed by chronoamperometry. An amplified signal on the addition of the same concns. of glucose was recorded with the B-type sol-gel glass electrode which was attributed to its relatively high porosity and better conductivity of the graphite loaded sol-gel glass. These observations were in accordance with the results on the diffusion of ferrocene and the magnitude of anodic current resulting from H<sub>2</sub>O<sub>2</sub> oxidation. The calibration plots for glucose anal. using both type of sensors are reported. Data on the mediated electrochem. oxidation of glucose oxidase

using soluble ferrocene were also reported based on cyclic voltammograms and amperometric measurement.

IT 3388-04-3, 2-(3,4-Epoxy cyclohexyl)-ethyltrimethoxysilane.

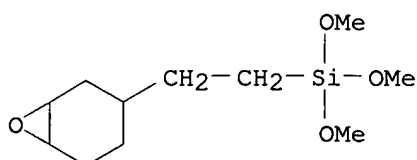
13822-56-5, 3-Aminopropyltrimethoxysilane

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(in preparation of glucose **biosensor** based on sandwich configuration of organically modified sol-gel glass)

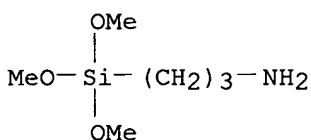
RN 3388-04-3 CAPLUS

CN Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]- (7CI, 8CI, 9CI)  
(CA INDEX NAME)



RN 13822-56-5 CAPLUS

CN 1-Propanamine, 3-(trimethoxysilyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l14 and polyethylene glycol

330940 POLYETHYLENE  
12194 POLYETHYLENES  
334671 POLYETHYLENE  
(POLYETHYLENE OR POLYETHYLENES)  
337044 GLYCOL  
44194 GLYCOLS  
352141 GLYCOL  
(GLYCOL OR GLYCOLS)  
95022 POLYETHYLENE GLYCOL  
(POLYETHYLENE(W) GLYCOL)

L15 1 L14 AND POLYETHYLENE GLYCOL

=> s l13 and polyethylene glycol

330940 POLYETHYLENE  
12194 POLYETHYLENES  
334671 POLYETHYLENE  
(POLYETHYLENE OR POLYETHYLENES)  
337044 GLYCOL  
44194 GLYCOLS  
352141 GLYCOL  
(GLYCOL OR GLYCOLS)  
95022 POLYETHYLENE GLYCOL  
(POLYETHYLENE(W) GLYCOL)

L16 15 L13 AND POLYETHYLENE GLYCOL

=> d l6 ibib abs hitstr tot

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:350720 CAPLUS

DOCUMENT NUMBER: 143:44178

TITLE: Biomedical applications of gold **nanoparticles** functionalized using hetero-bifunctional poly(ethylene glycol) spacer

AUTHOR(S): Fu, Wei; Shenoy, Dinesh; Li, Jane; Crasto, Curtis; Jones, Graham; Dimarzio, Charles; Sridhar, Srinivas; Amiji, Mansoor

CORPORATE SOURCE: Department of Physics, Northeastern University, Boston, MA, 02115, USA

SOURCE: Materials Research Society Symposium Proceedings (2005), 845(Nanoscale Materials Science in Biology and Medicine), 223-228

CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To increase the targeting potential, circulation time, and the flexibility of surface-attached biomedically-relevant ligands on gold **nanoparticles**, hetero-bifunctional poly(ethylene glycol) ( **PEG**, MW 1,500) was synthesized having a thiol group on one terminus and a reactive functional group on the other. Coumarin, a model fluorescent dye, was conjugated to the **PEG** spacer and gold **nanoparticles** were modified with coumarin-**PEG**-thiol. Surface attachment of coumarin through the **PEG** spacer decreases the fluorescence quenching effect of gold **nanoparticles**. The results of cellular cytotoxicity and fluorescence confocal analyses showed that the **PEG** spacer modified **nanoparticles** were essentially non-toxic and could be efficiently internalized in the cells within one hour of incubation.

IT 853684-75-0P

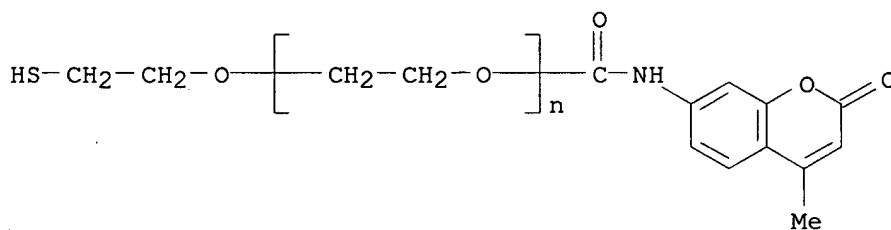
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(synthesis, cytotoxicity study, and fluorescence confocal microscopy of gold **nanoparticles** functionalized with thiol- and coumarin-terminated poly(ethylene glycol))

RN 853684-75-0 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[[[4-methyl-2-oxo-2H-1-benzopyran-7-yl)amino]carbonyl]- $\omega$ -(2-mercaptoethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:904041 CAPLUS

DOCUMENT NUMBER: 141:362759

TITLE: Water-soluble PEGylated semiconductor **nanoparticles**, their manufacture, and biological diagnostic materials using them

INVENTOR(S): Ogura, Atsuhiko; Kang, Eui-chul; Kataoka, Kazunori;



PATENT ASSIGNEE(S): Nagasaki, Yukio  
 SOURCE: NOF Corporation, Japan; Science University of Tokyo  
 Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004300253	A2	20041028	JP 2003-93900	20030331
US 2004250745	A1	20041216	US 2004-810305	20040326
PRIORITY APPLN. INFO.:			JP 2003-93900	A 20030331

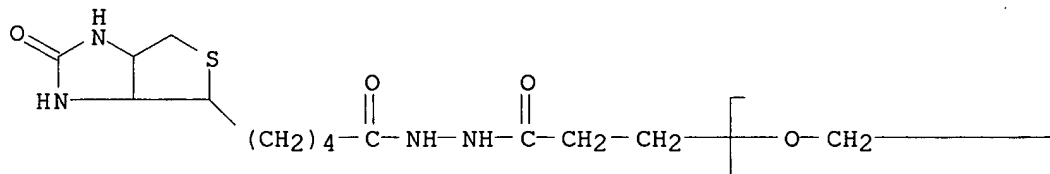
AB The **nanoparticles** comprise (a) group II-VI semiconductor core-shell microcrystals having ZnO, ZnS, ZnSe, or ZnTe shell and (b) **polyethylene glycols** having Mn 300-20,000 which have SH group at least one end and bind to (a) via Cd. The **nanoparticles** are manufactured by reacting (b) with Ca salts, and (a) or by adding Cd to the surface of (a) and reacting with (b). (b) may have SH group at one end and CHO, OH, NH<sub>2</sub>, or CO<sub>2</sub>H at the other end to which biomols. showing specific recognition ability are bound. Thus, a CHCl<sub>3</sub> solution of CdSe-ZnS semiconductor microcrystals (preparation given) was treated with a phosphate buffer containing  $\alpha$ -3,3-diethoxypropyl- $\omega$ -mercapto- **PEG** (preparation given) and CdCl<sub>3</sub> under vigorous stirring in the dark. The reaction mixture was mixed with hexane and phosphate buffer, separated, and irradiated with UV (254 nm) to show fluorescence only in the lower aqueous layer.

IT **780772-13-6DP**, reaction products with CdSe/ZnS core-shell microcrystals and CdCl<sub>3</sub>  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (manufacture of water-soluble PEGylated core-shell semiconductor **nanoparticles** having ZnO, ZnS, ZnSe, or ZnTe shell, and their application to biol. diagnosis)

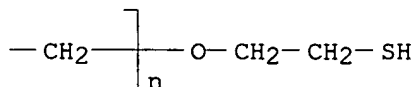
RN 780772-13-6 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[2-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]hydrazino]-3-oxopropyl]- $\omega$ -(2-mercaptoethoxy)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:868459 CAPLUS

DOCUMENT NUMBER: 142:436504

TITLE: Biocompatible gold **nanoparticles**

AUTHOR(S): Tshikhudo, T. R.; Wang, Z.; Brust, M.

CORPORATE SOURCE: Centre for Nanoscale Science, Department of Chemistry,  
The University of Liverpool, Liverpool, L69 7ZD, UK

SOURCE: Materials Science and Technology (2004), 20(8),  
980-984

CODEN: MSCTEP; ISSN: 0267-0836

PUBLISHER: Maney Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thiolalkylated **polyethylene glycol (PEG)**

ligands were designed and synthesized for use in the manufacturing of stable  
H2O

soluble Au MPCs. In addition to ongoing work on the synthesis of size and  
shape

selective aqueous Au **nanoparticles**, the effect of avidin Au  
**nanoparticle** (AGNP) ratio on biotinylated peptide Au  
**nanoparticles** (BPGNP) also was studied.

IT 850444-77-8P

RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(manufacturing of biocompatible, water soluble gold **nanoparticles**  
using thiolalkylated **polyethylene glycol**)

RN 850444-77-8 CAPLUS

CN 3,6,9,12-Tetraoxatricosane-23-thiol, 1-amino- (9CI) (CA INDEX NAME)

$\text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{O}-(\text{CH}_2)_{11}-\text{SH}$

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:424087 CAPLUS

DOCUMENT NUMBER: 141:145667

TITLE: Design of water-soluble quantum dots with novel  
surface ligands for biological applications

AUTHOR(S): Uyeda, H. Tetsuo; Medintz, Igor L.; Mattoussi, Hedi

CORPORATE SOURCE: Division of Optical Sciences, U.S. Naval Research  
Laboratory, Washington, DC, 20375, USA

SOURCE: Materials Research Society Symposium Proceedings  
(2004), Volume Date 2003, 789(Quantum Dots,  
Nanoparticles and Nanowires), 111-116

CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:145667

AB We have designed a series of organic oligo- and **polyethylene**  
**glycol (PEG)** based surface capping ligands that allow

for QD manipulation in aqueous media. We utilized readily available thioctic  
acid and various oligo- and **polyethylene glycols** in  
simple esterification schemes, followed by reduction of the dithiolane to  
produce multi-gram quantities of capping substrates. Cap exchange of the  
native trioctyl-phosphine and -phosphine oxide based ligands with the  
**PEG**-terminated dithiol-alkyl cap readily resulted in aqueous  
dispersions of QDs that were homogeneous and stable in various pH ranges  
over an extended period of time. Mixed surface capping strategies

utilizing ratios of dihydrolipoic acid to the pegylated dihydrolipoic acid were also prepared. We anticipated that such systems should allow one to covalently attach amine containing biomols. to **nanoparticle** systems bearing carboxylates, employing known coupling agents, such as (dimethylamino) propyl-3-ethyl-carbodiimide (EDC). This design and conjugation strategy may facilitate the development of a new generation of QD-bioconjugates, which can be directly utilized in bio-related applications such as sensing and cellular imaging.

IT **725211-24-5P**

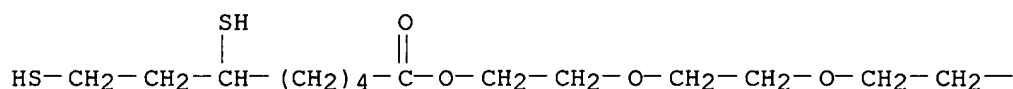
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(design of water-soluble CdSe/ZnS quantum dots with novel pegylated dihydrolipoic acid as surface ligands for biosensing or cellular imaging)

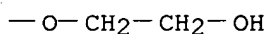
RN 725211-24-5 CAPLUS

CN Octanoic acid, 6,8-dimercapto-, 2-[2-[2-(2-hydroxyethoxy)ethoxy]ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT **725211-26-7P 725211-28-9P**

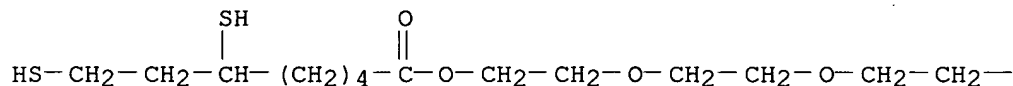
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(for coating on quantum dots; design of water-soluble CdSe/ZnS quantum dots with novel pegylated dihydrolipoic acid as surface ligands for biosensing or cellular imaging)

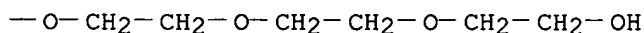
RN 725211-26-7 CAPLUS

CN Octanoic acid, 6,8-dimercapto-, 17-hydroxy-3,6,9,12,15-pentaoxaheptadec-1-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

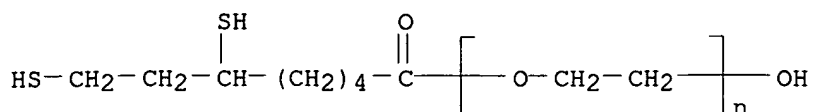


PAGE 1-B



RN 725211-28-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(6,8-dimercapto-1-oxooctyl)- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:5676 CAPLUS

DOCUMENT NUMBER: 140:220643

TITLE: The zwitterion effect in high-conductivity polyelectrolyte materials

AUTHOR(S): Tiyaipiboonchaiya, Churat; Pringle, Jennifer M.; Sun, Jiazeng; Byrne, Nolene; Howlett, Patrick C.; MacFarlane, Douglas R.; Forsyth, Maria

CORPORATE SOURCE: School of Chemistry, Monash University, Clayton, Victoria, 3800, Australia

SOURCE: Nature Materials (2004), 3(1), 29-32  
CODEN: NMAACR; ISSN: 1476-1122

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

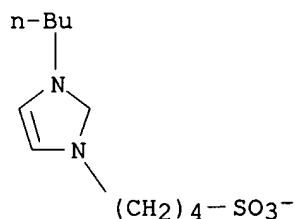
AB The future of lithium metal batteries as a widespread, safe and reliable form of high-energy-d. rechargeable battery depends on a significant advancement in the electrolyte material used in these devices. Mol. solvent-based electrolytes were superseded by polymer electrolytes in some prototype devices, primarily in a drive to overcome leakage and flammability problems, but these often exhibit low ionic conductivity and prohibitively poor lithium-ion transport. To overcome this, it is necessary to encourage dissociation of the lithium ion from the anionic polymer backbone, ideally without the introduction of competing, mobile ionic species. Here the authors demonstrate the effect of zwitterionic compds., where the cationic and anionic charges are immobilized on the same mol., as extremely effective lithium ion dissociation enhancers. The zwitterion produces electrolyte materials with conductivities up to seven times larger than the pure polyelectrolyte gels, a phenomenon that appears to be common to a number of different copolymer and solvent systems.

IT 439937-61-8P

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)  
(zwitterion, gels with P(AMPSLi-c-DMAA)/PC and also with TiO<sub>2</sub>;  
zwitterion effect in high-conductivity polyelectrolyte materials)

RN 439937-61-8 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-(4-sulfobutyl)-, inner salt (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:971864 CAPLUS

DOCUMENT NUMBER: 140:31485

TITLE: Immediate-release pharmaceutical formulation of amidine compounds

INVENTOR(S): Abrahmsen Alami, Susanna; Inghardt, Tord; Magnusson, Anders; Sigfridsson, Carl-Gustaf; Thune, Mikael

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 127 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

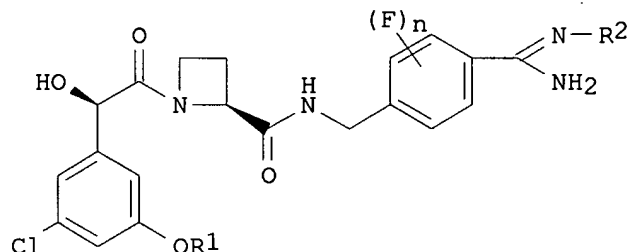
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003101423	A1	20031211	WO 2003-SE857	20030527
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2485533	AA	20031211	CA 2003-2485533	20030527
BR 2003011363	A	20050301	BR 2003-11363	20030527
EP 1513496	A1	20050316	EP 2003-730964	20030527
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRIORITY APPLN. INFO.:			SE 2002-1658	A 20020531
			WO 2003-SE857	W 20030527

OTHER SOURCE(S): MARPAT 140:31485

GI



I

AB An immediate-release pharmaceutical formulation is provided comprising (a) as active ingredient, a compound of formula I (R1 = C1-2 alkyl substituted by one or more fluoro substituents; R2 = H, OH, OMe, OEt; n = 0, 1, 2) or a pharmaceutically acceptable salt thereof; and (b) a pharmaceutically acceptable diluent or carrier. When the active ingredient is other than

in the form of a salt, the formulation does not solely contain (i) a solution of one active ingredient and water, (ii) a solution of one active ingredient and DMSO, or (iii) a solution of one active ingredient in a mixture of ethanol/PEG 660 12-hydroxy stearate/water (5:5:90). Such formulations are used for the treatment of a cardiovascular disorder. For example, a solution was prepared by dissolving Compound A [I (R1 = CHF2, R2 = OMe, n = 0)

(preparation

given)] in a hydroxypropyl-β-cyclodextrin/water diluent (40:60 weight/weight%) (136 μmol Compound A to 1 mL diluent) and adjusting pH to 3.7 with HCl. The solubility of Compound A was at least 700 times higher in this vehicle compared to water alone.

IT 631916-91-1P 631917-18-5P 631917-19-6P

631917-20-9P 631917-31-2P 634151-59-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and immediate-release formulation of amidine compds. for treatment of thrombosis)

RN 631916-91-1 CAPLUS

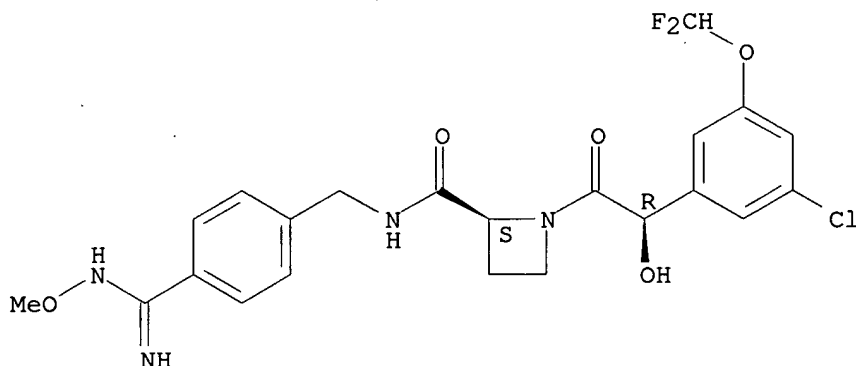
CN Ethanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

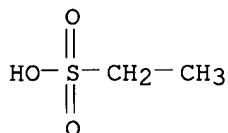
Absolute stereochemistry.



CM 2

CRN 594-45-6

CMF C2 H6 O3 S



RN 631917-18-5 CAPLUS

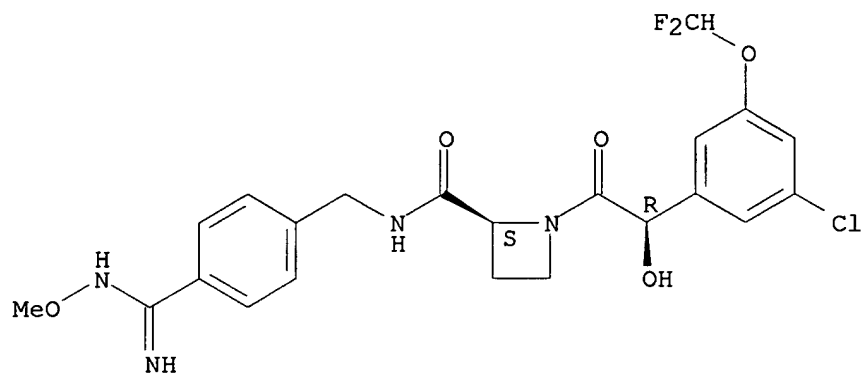
CN 1-Propanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

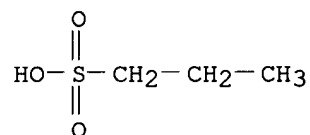
Absolute stereochemistry.



CM 2

CRN 5284-66-2

CMF C3 H8 O3 S



RN 631917-19-6 CAPLUS

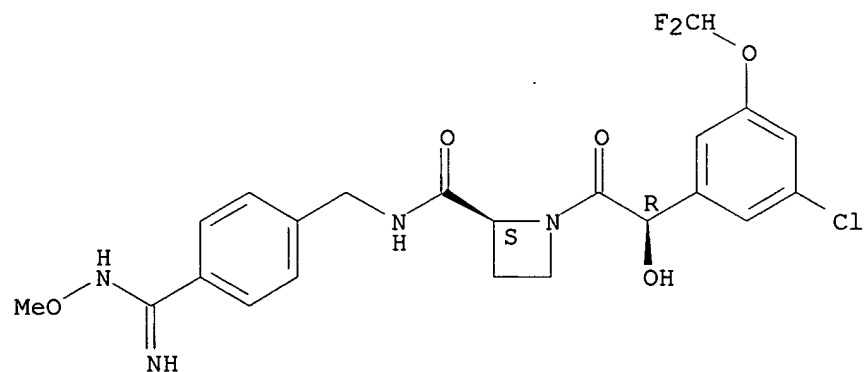
CN 1-Butanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0

CMF C22 H23 Cl F2 N4 O5

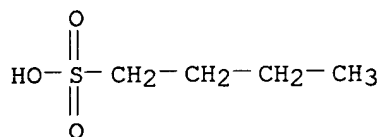
Absolute stereochemistry.



CM 2

CRN 2386-47-2

CMF C4 H10 O3 S



RN 631917-20-9 CAPLUS

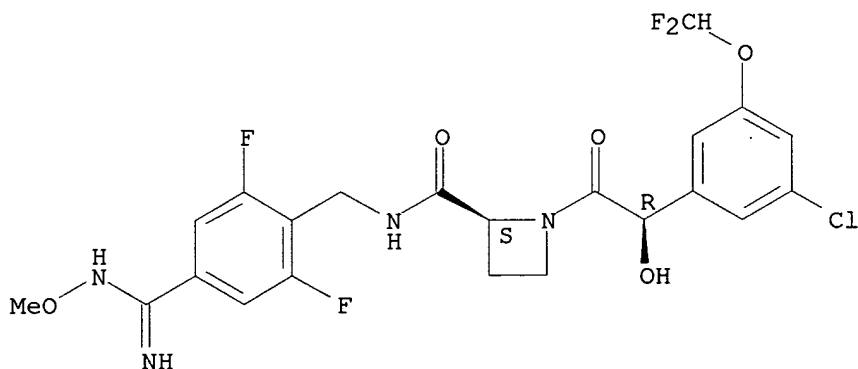
CN Ethanesulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[2,6-difluoro-4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 433938-32-0

CMF C22 H21 Cl F4 N4 O5

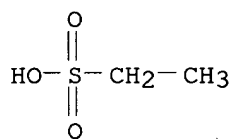
Absolute stereochemistry.



CM 2

CRN 594-45-6

CMF C2 H6 O3 S



RN 631917-31-2 CAPLUS

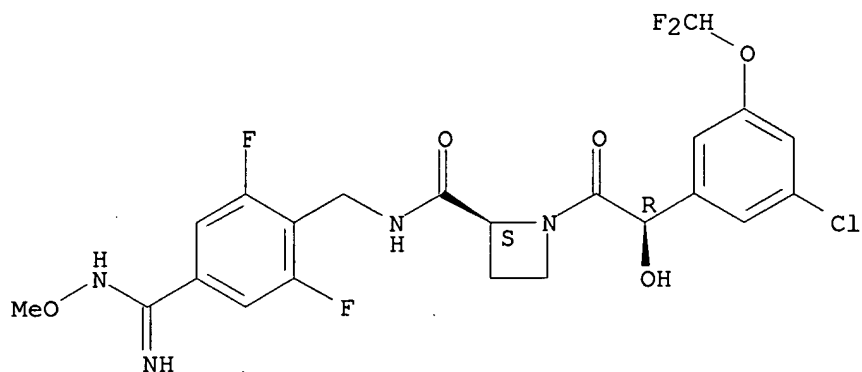
CN 1,2-Ethanedisulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[2,6-difluoro-4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:2)  
(9CI) (CA INDEX NAME)

CM 1



CRN 433938-32-0  
CMF C22 H21 Cl F4 N4 O5

Absolute stereochemistry.



CM 2

CRN 110-04-3  
CMF C2 H6 O6 S2

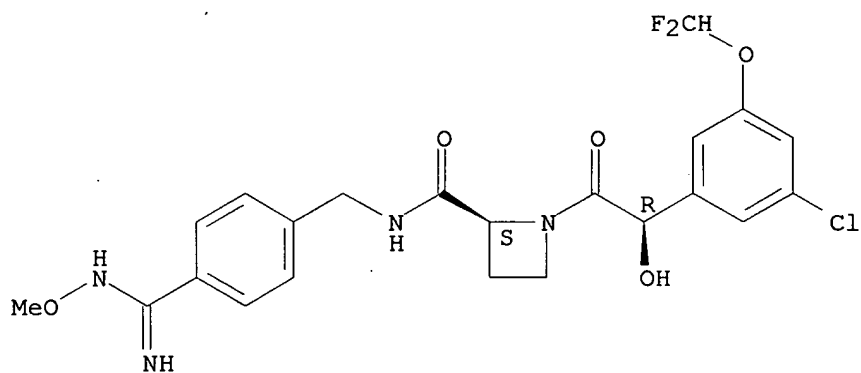
HO<sub>3</sub>S-CH<sub>2</sub>-CH<sub>2</sub>-SO<sub>3</sub>H

RN 634151-59-0 CAPLUS  
CN 1,2-Ethanedisulfonic acid, compd. with (2S)-1-[(2R)-[3-chloro-5-(difluoromethoxy)phenyl]hydroxyacetyl]-N-[[4-[imino(methoxyamino)methyl]phenyl]methyl]-2-azetidinecarboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 433937-93-0  
CMF C22 H23 Cl F2 N4 O5

Absolute stereochemistry.



CM 2

CRN 110-04-3  
CMF C2 H6 O6 S2

HO<sub>3</sub>S-CH<sub>2</sub>-CH<sub>2</sub>-SO<sub>3</sub>H

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:797006 CAPLUS

DOCUMENT NUMBER: 139:304103

TITLE: Biosensor chip surface carrying polyethylene glycolated **nanoparticles**

INVENTOR(S): Kataoka, Kazunori; Nagasaki, Yukio; Otsuka, Hidenori; Uchida, Katsumi; Ishii, Takehiko; Suzuki, Yuko; Akiyama, Yoshitsugu; Takae, Seiji

PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003083478	A1	20031009	WO 2003-JP3504	20030324
W: CA, CN, KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2480770	AA	20031009	CA 2003-2480770	20030324
EP 1496363	A1	20050112	EP 2003-712842	20030324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2005106570	A1	20050519	US 2003-509576	20030324
JP 2005180921	A2	20050707	JP 2003-80524	20030324
PRIORITY APPLN. INFO.:			JP 2002-101134	A 20020403
			WO 2003-JP3504	W 20030324

AB A highly sensitive bioassay sensor system is provided, with which nonspecific adsorption of impurities such as proteins in a biol. sample is prevented. For amplification in this system used are polyethylene glycolated particles in which a metal or semiconductor common to the sensor material is enclosed. These particles are carried by the biosensor chip surface through a pair of biol. specific binding substances, one of which (e.g., carbohydrate, antigen, hapten, enzyme substrate, hormone, oligonucleotide, biotin) is bound to the particles, and the other of which (e.g., lectin, antibody, enzyme, hormone receptor, complimentary oligo-/polynucleotide, streptavidin) is bound to the sensor surface. A test substance is detected by measuring the change in the extent of binding of the particles to the biosensor chip surface upon the competition by the test substance.

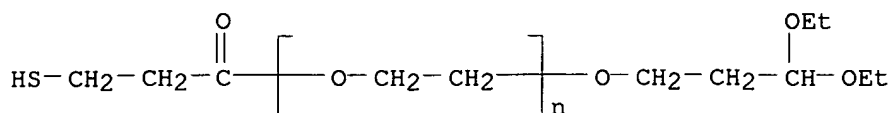
IT **610778-56-8P 610778-57-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

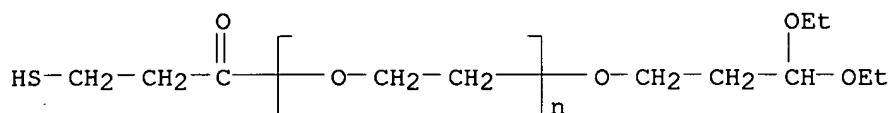
(biosensor chip surface carrying polyethylene glycolated **nanoparticles**)

RN 610778-56-8 CAPLUS

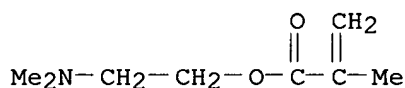
CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(3-mercapto-1-oxopropyl)- $\omega$ -(3,3-diethoxypropoxy)- (9CI) (CA INDEX NAME)



RN 610778-57-9 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, telomer with  
 $\alpha$ -(3-mercapto-1-oxopropyl)- $\omega$ -(3,3-diethoxypropoxy)poly(oxy-1,2-  
 ethanediyl) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 610778-56-8  
 CMF (C2 H4 O)<sub>n</sub> C10 H20 O4 S  
 CCI PMS



CM 2  
 CRN 25154-86-3  
 CMF (C8 H15 N O2)<sub>x</sub>  
 CCI PMS  
 CM 3  
 CRN 2867-47-2  
 CMF C8 H15 N O2



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2003:532140 CAPLUS  
 DOCUMENT NUMBER: 139:106450  
 TITLE: Targeted multivalent macromolecules  
 INVENTOR(S): Wartchow, Charles Aaron; Dechene, Neal Edward; Pease,  
 John S.; Shen, Zhimin; Trulson, Julie; Bednarski, Mark  
 David; Danthi, S. Narasimhan; Zhang, Michael; Choi,  
 Hoyul Steven  
 PATENT ASSIGNEE(S): Targesome, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 71 pp., Cont.-in-part of U.S.  
 Ser. No. 976,254.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003129223	A1	20030710	US 2002-158777	20020530
US 2002071843	A1	20020613	US 2001-976254	20011011
PRIORITY APPLN. INFO.:			US 2000-239684P	P 20001011
			US 2001-294309P	P 20010530
			US 2001-309104P	P 20010731
			US 2001-312435P	P 20010815
			US 2001-976254	A2 20011011

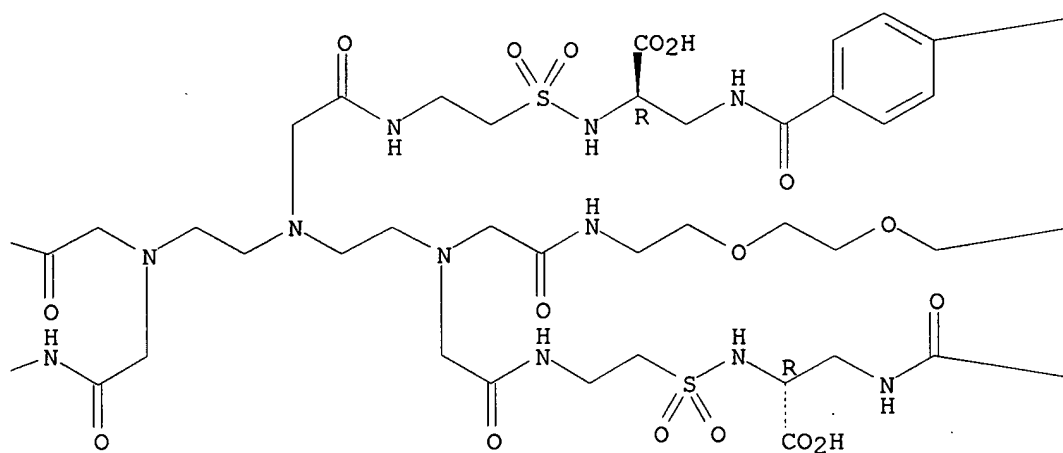
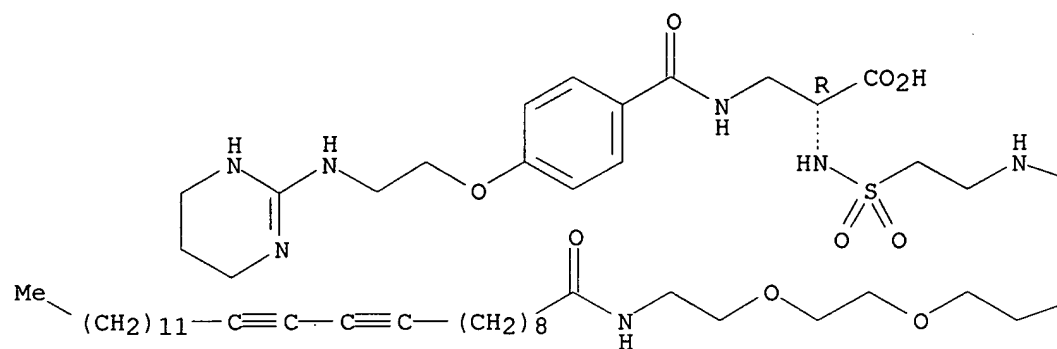
AB Targeted therapeutic agents, comprising a linking carrier, a therapeutic entity associated with the linking carrier, and at least one targeting entity are provided, as well as methods for their preparation and use. A targeted therapeutic agent is selected from matrix metalloprotease inhibitors, analgesics, aggrecanase inhibitors, alkylating agents, topoisomerase inhibitors, estrogens, androgens, interferons, intercalating agents, kinase modulators, etc. The linking carrier comprises a phosphatidylcholine and is selected from liposomes and a polymerized vesicle. A targeting entity targets a lipid construct to a target selected from a cell surface target, an intracellular target, and an extracellular matrix component. The targeting entity has, e.g., a vascular or tumor cell target selected from chemokine receptors, matrix metalloproteases, integrins, or prostate-specific membrane antigens. For example, integrin-targeted 90Y-labeled peptidomimetic vesicle complexes (IA-NP-Y90) at 5  $\mu$ Ci/g reduced tumor growth in a melanoma mouse model with average normalized tumor volume less than half the volume in the buffer-treated animals. In addition, the average tumor volume quadrupling time (TVQT) for tumor treated with IA-NP-Y90 was 15.0 days compared to 6.4 days for tumors treated with buffer.

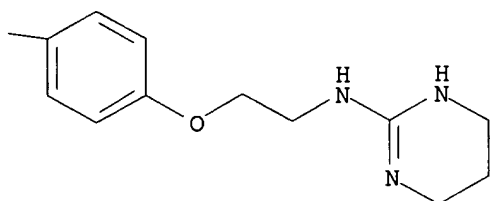
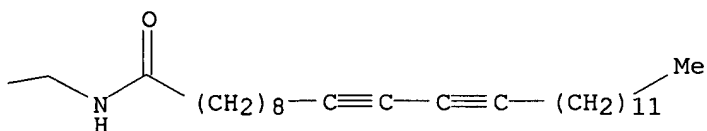
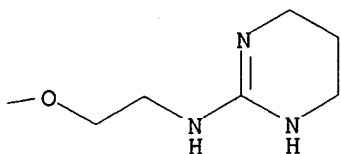
IT **477274-37-6DP**, polymer containing  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (paramagnetic **nanoparticles** containing; preparation of targeted multivalent macromols. for therapy, imaging and diagnosis of cancer)

RN 477274-37-6 CAPLUS

CN 4,22-Dithia-3,7,10,13,16,19,23-heptaazapentacosanedioic acid, 13-[(8R)-8-carboxy-6,6-dioxido-2,11-dioxo-11-[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]phenyl]-6-thia-3,7,10-triazaundec-1-yl]-10,16-bis(2,13-dioxo-6,9-dioxa-3,12-diazaheptatriaconta-22,24-diyn-1-yl)-8,18-dioxo-2,24-bis[[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]methyl]-, 4,4,22,22-tetraoxide, (2R,24R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT 477249-25-5P 477249-26-6P 477249-27-7P  
477249-28-8P 477249-29-9P

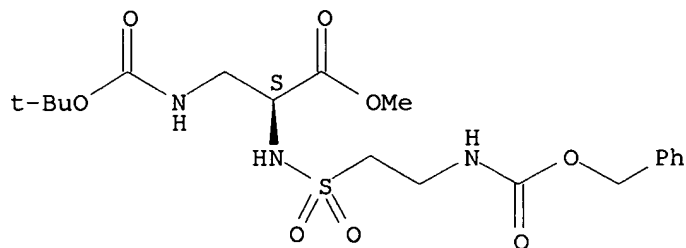
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of targeted multivalent macromols. for therapy, imaging and  
diagnosis of cancer)

RN 477249-25-5 CAPLUS

CN 5-Thia-2,6,9-triazadecanedioic acid, 7-(methoxycarbonyl)-,  
10-(1,1-dimethylethyl) 1-(phenylmethyl) ester, 5,5-dioxide, (7S)- (9CI)  
(CA INDEX NAME)

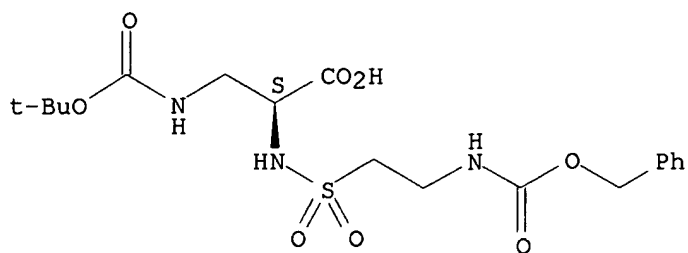
Absolute stereochemistry.



RN 477249-26-6 CAPLUS

CN 5-Thia-2,6,9-triazadecanedioic acid, 7-carboxy-, 10-(1,1-dimethylethyl)  
1-(phenylmethyl) ester, 5,5-dioxide, (7S)- (9CI) (CA INDEX NAME)

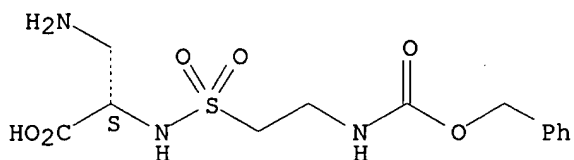
Absolute stereochemistry.



RN 477249-27-7 CAPLUS

CN 2-Oxa-7-thia-4,8-diazadecan-10-oic acid, 9-(aminomethyl)-3-oxo-1-phenyl-, 7,7-dioxide, (9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

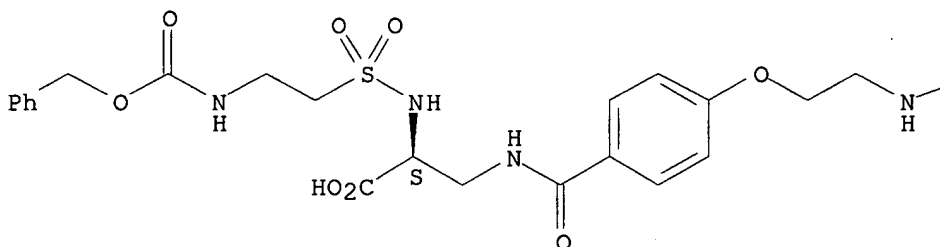


RN 477249-28-8 CAPLUS

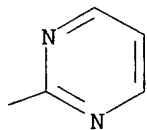
CN 2-Oxa-7-thia-4,8-diazadecan-10-oic acid, 3-oxo-1-phenyl-9-[[[4-[2-(2-pyrimidinylamino)ethoxy]benzoyl]amino]methyl]-, 7,7-dioxide, (9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



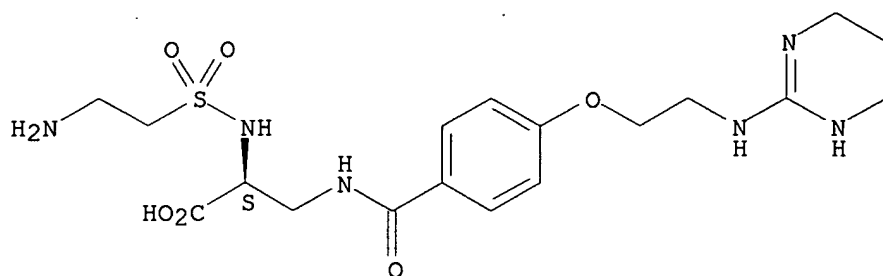
PAGE 1-B



RN 477249-29-9 CAPLUS

CN L-Alanine, N-[(2-aminoethyl)sulfonyl]-3-[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **477274-37-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)

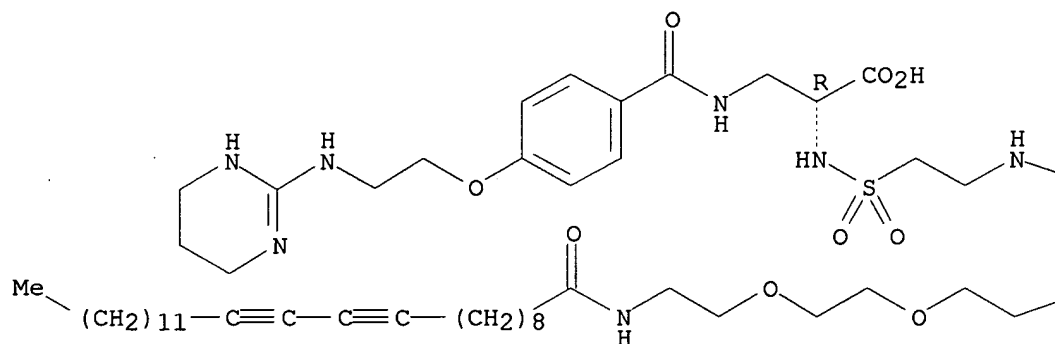
(preparation of targeted multivalent macromols. for therapy, imaging and  
diagnosis of cancer)

RN 477274-37-6 CAPLUS

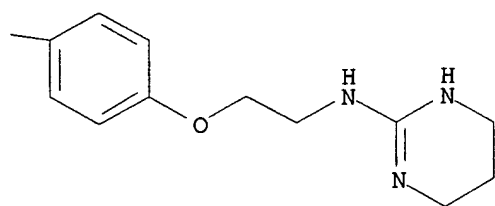
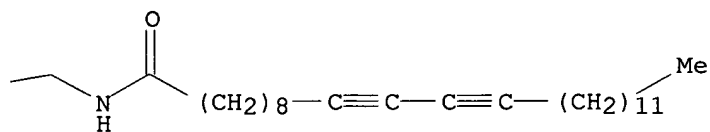
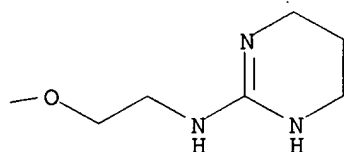
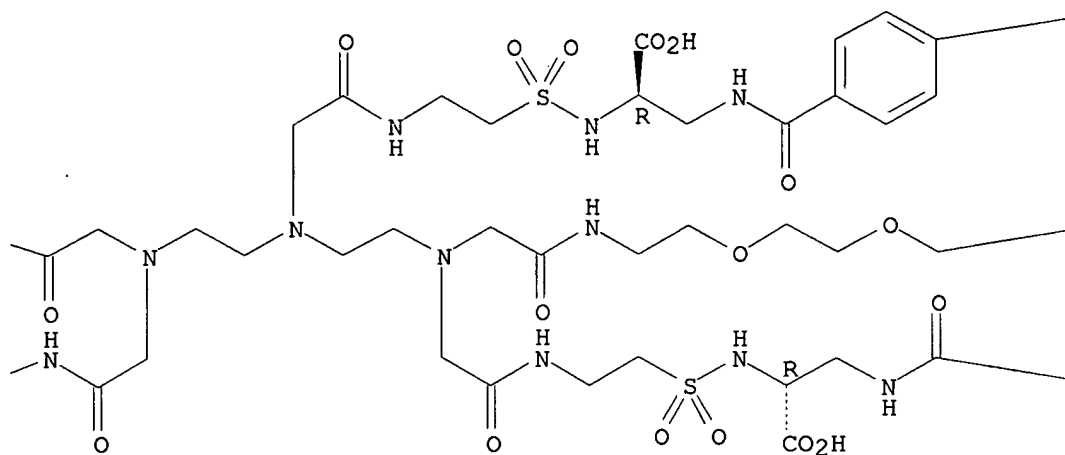
CN 4,22-Dithia-3,7,10,13,16,19,23-heptaazapentacosanedioic acid,  
13-[(8R)-8-carboxy-6,6-dioxido-2,11-dioxo-11-[4-[2-[(1,4,5,6-tetrahydro-2-  
pyrimidinyl)amino]ethoxy]phenyl]-6-thia-3,7,10-triazaundec-1-yl]-10,16-  
bis(2,13-dioxo-6,9-dioxo-3,12-diazaheptatriaconta-22,24-diyn-1-yl)-8,18-  
dioxo-2,24-bis[[[4-[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benz  
oyl]amino]methyl]-, 4,4,22,22-tetraoxide, (2R,24R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A







IT **477274-46-7P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of targeted multivalent macromols. for therapy, imaging and diagnosis of cancer)

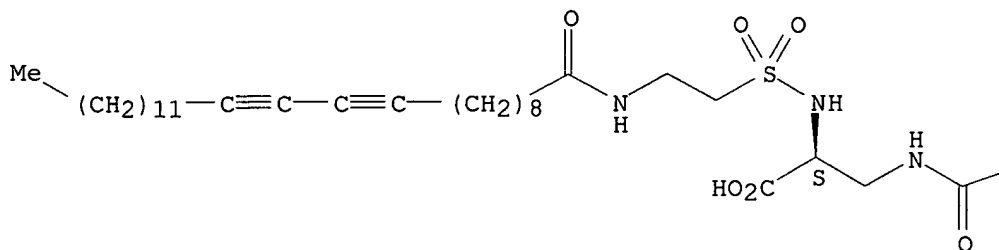
RN 477274-46-7 CAPLUS

CN L-Alanine, N-[[2-[(1-oxo-10,12-pentacosadiynyl)amino]ethyl]sulfonyl]-3-[[4-

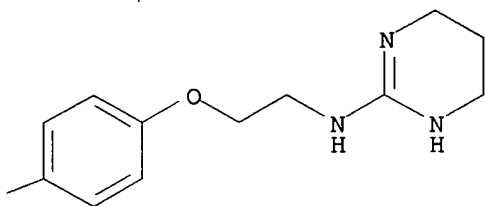
[2-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]ethoxy]benzoyl]amino]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:346582 CAPLUS

DOCUMENT NUMBER: 138:61132

TITLE: Gels and **nanoparticles** responsive to physiological pH

AUTHOR(S): Bae, Y. H.; Na, K.; Han, S. K.; Kang, S. I.; Lee, E. S.

CORPORATE SOURCE: Center for Biomaterial and Biotechnology, Kwangju Institute of Science and Technology, Kwangju, 500-712, S. Korea

SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 1, 10-11. Controlled Release Society: Minneapolis, Minn. CODEN: 69CNY8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB This presentation summarizes our recent works on the properties of soluble polymers, hydrogels, and nanoparticulates (self-assembled **nanoparticles** and polymeric micelles) that are responsive to pH. Incorporation of a weak acidic moiety of sulfonamide or weak basic imidazole groups into the polymers endowed remarkable pH sensitivities, such as sharp transitions in polymer solubility, swelling volume of hydrogels, **nanoparticle** aggregation, and micelle disruption in a narrow pH range, particularly around physiol. pH. These aspects of the polymeric systems may provide us new applications in carrier targeting to tumors, pH-triggered release, biosepn., sensor, and actuators.

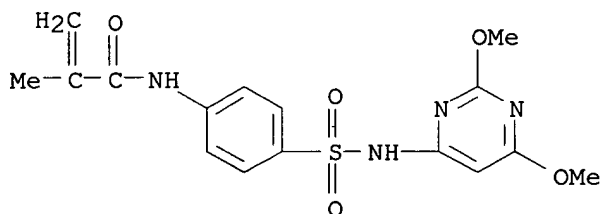
IT **479586-83-9DP**, reaction products with carboxylated lactide-polyethylene glycol block polymer

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(sulfonamide copolymer gels and **nanoparticles** responsive to  
 physiol. pH)  
 RN 479586-83-9 CAPLUS  
 CN 2-Propenamide, N-[4-[[[(2,6-dimethoxy-4-pyrimidinyl)amino]sulfonyl]phenyl]-  
 2-methyl-, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 60-24-2  
 CMF C2 H6 O S

HO-CH<sub>2</sub>-CH<sub>2</sub>-SH

CM 2  
 CRN 479586-82-8  
 CMF (C16 H18 N4 O5 S)x  
 CCI PMS  
 CM 3  
 CRN 287967-58-2  
 CMF C16 H18 N4 O5 S



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:286166 CAPLUS  
 DOCUMENT NUMBER: 136:311326  
 TITLE: Coating compositions containing luminescent  
 semiconductor **nanoparticles**  
 INVENTOR(S): Kawa, Manabu  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002114928	A2	20020416	JP 2000-306965	20001006
PRIORITY APPLN. INFO.:			JP 2000-306965	20001006

AB The coatings useful for detective applications such as finger print  
 finding, counterfeit detection, etc., contain polymer binders,  
 semiconductor **nanoparticles** of Zn or Cd type and solvents.  
 Thus, adding 0.4 g a triethylene glycol monomethyl ether (I)

11-mercaptoundecanoate to a dissoln. of .apprx.0.5 g CdSe nanocrystals having ZnS shells and Ph3PO ligand on surface in 6 mL CH2Cl2 and reacting in the dark for 18 h gave an EtOH-soluble product containing I as ligand which replaced for Ph3PO. Dissolving the product in CH2Cl2, adding EtOH, evaporating to remove CH2Cl2, mixing with a **polyethylene glycol** methacrylate 0.5, Me methacrylate 0.2, AIBN 0.05 and a poly(ethylene oxide) 0.2 g gave a solution, a finger print obtained from it after impressing on a paper and polymerization by heat showed orange color.

IT **394647-01-9**, Triethylene glycol monomethyl ether

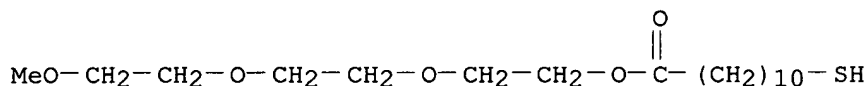
11-mercaptoundecanoate

RL: MOA (Modifier or additive use); USES (Uses)

(soluble ligands for nanocrystals; coating comps. containing luminescent semiconductor **nanoparticles**)

RN 394647-01-9 CAPLUS

CN Undecanoic acid, 11-mercapto-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
78.64	462.97

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-8.03	-15.33

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